

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

2830 CALDER AVENUE

BEAUMONT, TX 77701

OWNER

CHRISTUS Hospital St Elizabeth
2830 CALDER AVENUE
BEAUMONT, TX 77701

Contact: ???
Phone: (409) ???-????
Email: ???@???.com

ARCHITECT

ARCHITECTURAL ALLIANCE, INCORPORATED
350 Pine Street Suite 720
Beaumont, Texas 77701

Contact: Ronnie Jones
Phone: (409) 866-7196
Email: rjones@architect-aia.com

MECHANICAL, ELECTRICAL, PLUMBING

M&E Consulting
1304 Bertrand Drive Suite F7
Lafayette, Louisiana 70506

Contact: David Carroll, P.E.
Phone: (337) 234-7474
Email: david@meconsulting.com

ABBREVIATIONS

A.B.	ANCHOR BOLT	DR	DOOR	HW	HOT WATER	OPNG	OPENING	THK	THICK(NESS)
A/C	AIR CONDITIONING	DS	DOWNSPOUT			OPP	OPPOSITE	TI	TENANT IMPROVEMENT
ACT	ACOUSTICAL CEILING TILE	DWR	DRAWER	ID	INSIDE DIAMETER			TO	TOP OF (SPECIFY ITEM)
A.D.	AREA DRAIN			IN	INCH	PERP	PERPENDICULAR	TOC	TOP OF CURB / CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT	EA	EACH	INCL	INCLUDE(D)	PL	PLATE (OR PROPERTY LINE)	TOP	TOP OF PARAPET
	ADJUSTABLE	EF	EACH FACE / EXHAUST FAN	INSUL	INSULATION	PLAM	PLASTIC LAMINATE	TOS	TOP OF STEEL
ADJ	ADJUSTABLE	EJ	EXPANSION JOINT	INT	INTERIOR	PLAS	PLASTER	TOW	TOP OF WALL
AFF	ABOVE FINISH FLOOR	EJFS	EXTERIOR INSULATED FINISH SYSTEM	INV	INVERT	PLYWD	PLYWOOD	TPTN	TOILET PARTITION
ALT	ALTERNATE					PNL	PANEL	TS	TUBULAR STEEL
ALUM	ALUMINUM	ELEC	ELECTRICAL	JAN	JANITOR	PNT	PAINT	TV	TELEVISION
ANOD	ANODIZED	ELEV	ELEVATION	JST	JOIST	PR	PAIR	TYP	TYPICAL
APPROX	APPROXIMATE	EMER	EMERGENCY	JT	JOINT	PSF	POUNDS PER SQUARE FOOT		
ARCH	ARCHITECT(URAL)	ENCL	ENCLOSURE			PSI	POUNDS PER SQUARE INCH	UC	UNDERCOUNTER
ASPH	ASPHALT	EQ	EQUAL	KD	KNOCK DOWN	PT	PRESSURE TREATED	UL	UNDERWRITERS LABORATORY
		EQUIP	EQUIPMENT	KIT	KITCHEN	PTN	PARTITION	UNO	UNLESS NOTED OTHERWISE
		EW	EACH WAY	KO	KNOCK OUT	PVC	POLYVINYL CHLORIDE		
BD	BOARD	EWC	ELECTRIC WATER COOLER					VCT	VINYL COMPOSITION TILE
BIT	BITUMINOUS	EXH	EXHAUST	LAB	LABORATORY	RA	RETURN AIR	VENT	VENTILATION
BLDG	BUILDING	EXIST	EXISTING	LAM	LAMINATE(D)	RAD	RADIUS	VERT	VERTICAL
BLKG	BLOCKING	EXP	EXPANSION / EXPOSED	LAV	LAVATORY	RB	RESILIENT BASE	VEST	VESTIBULE
BM	BEAM	EXT	EXTERIOR	LF	LINEAL FOOT	RCP	REFLECTED CEILING PLAN	VIF	VERIFY IN FIELD
B.O.	BOTTOM OF			LH	LEFT HAND	RD	ROOF DRAIN	VR	VAPOR RETARDER
BOT	BOTTOM	FD	FLOOR DRAIN	LHR	LEFT HAND REVERSE	REBAR	REINFORCING BAR	VTR	VENT THRU ROOF
BRG	BEARING	FDN	FOUNDATION	LL	LIVE LOAD	REC	RECESSED	VWC	VINYL WALL COVERING
BTWN	BETWEEN	FE	FIRE EXTINGUISHER	LLH	LONG LEG HORIZONTAL	REF	REFERENCE		
BUR	BUILT-UP ROOF	FEC	FIRE EXTINGUISHER	LLV	LONG LEG VERTICAL	REFR	REFRIGERATOR	WC	WATER CLOSET
				LWC	LIGHT WEIGHT CONCRETE	REIN	REINFORCING / REINFORCED	WD	WOOD
CAB	CABINET					REQD	REQUIRED	WDW	WINDOW
CBU	CEMENTITIOUS BACKER UNIT	FF	FINISH FLOOR	MACH	MACHINE	RES	RESILIENT	W/	WITH
		FFE	FINISH FLOOR ELEVATION	MAS	MASONRY	REV	REVISION	WH	WATER HEATER
C/C	CENTER-TO-CENTER	FIN	FINISH	MATL	MATERIAL	RH	RIGHT HAND	W/O	WITHOUT
CEM	CEMENT	FLR	FLOOR	MAX	MAXIMUM	RHR	RIGHT HAND REVERSE	WP	WATERPROOF
CER	CERAMIC	FLUOR	FLUORESCENT	MDF	MEDIUM DENSITY FIBERBOARD	RM	ROOM	WR	WATER RESISTANT
C.G.	CORNER GUARD	FM	FACTORY MUTUAL	MECH	MECHANICAL	RO	ROUGH OPENING	WT	WEIGHT
C.I.P.	CAST-IN-PLACE	FO	FACE OF (SPECIFY ITEM)	MEMB	MEMBRANE	RWL	RAINWATER LEADER	WWF	WELDED WIRE FABRIC
C.J.	CONTROL JOINT	FOB	FACE OF BRICK	MFR	MANUFACTURER	R&S	ROD AND SHELF	WWM	WELDED WIRE MESH
CL	CENTERLINE	FOC	FACE OF CONCRETE	MEZZ	MEZZANINE				
CLG	CEILING	FOS	FACE OF STUD	MH	MANHOLE	SC	SOLID CORE	YD	YARD
CLR	CLEAR(ANCE)	FR	FIRE RESISTIVE	MIN	MINIMUM	SCHED	SCHEDULE		
CLOS	CLOSET	FT	FEET / FOOT	MIR	MIRROR	SF	SQUARE FEET		
CMU	CONCRETE	FTG	FOOTING	MISC	MISCELLANEOUS	SHT	SHEET		
		FURR	FURRING / FURRED	MO	MASONRY OPENING	SIM	SIMILAR		
C.O.	CLEAN OUT			MR	MOISTURE RESISTANT	SPEC	SPECIFICATION		
COL	COLUMN	GA	GAUGE	MTL	METAL	SQ	SQUARE		
CONC	CONCRETE	GALV	GALVANIZED	MULL	MULLION	SS	STAINLESS STEEL		
CONSTR	CONSTRUCTION	GB	GRAB BAR			ST	STONE		
CONT	CONTINUOUS	GC	GENERAL CONTRACTOR			STC	SOUND TRANSMISSION CLASS		
COORD	COORDINATE	GL	GLASS / GLAZING	N/A	NOT APPLICABLE	STD	STANDARD		
CORR	CORRIDOR	GND	GROUND	NIC	NOT IN CONTRACT	STL	STEEL		
CTR	CENTER	GR	GRADE	NO	NUMBER	STOR	STORAGE		
C.Y.	CUBIC YARD	GWB	GYPSUM WALLBOARD	NOM	NOMINAL	STRUCT	STRUCTURAL		
		GYP	GYPSUM	NTS	NOT TO SCALE	SUSP	SUSPENDED		
DBL	DOUBLE					SYM	SYMMETRICAL		
DEMO	DEMOLITION	HB	HOSE BIB	OC	ON CENTER			TAS	TEXAS ACCESSIBILITY STANDARDS
DEPT	DEPARTMENT	HC	HOLLOW CORE	OD	OUTSIDE DIAMETER			T&B	TOP AND BOTTOM
DET	DETAIL	HDR	HEADER	OFCI	(OR OVERFLOW DRAIN)			T&G	TONGUE AND GROOVE
DIA	DIAMETER	HDWR	HARDWARE	OFOI	OWNER FURNISHED/ CONTRACTOR INSTALLED			TBD	TO BE DETERMINED
DIAG	DIAGONAL	HM	HOLLOW METAL					TEL	TELEPHONE
DIM	DIMENSION	HORIZ	HORIZONTAL					TER	TERRAZZO
DISP	DISPENSER	HT	HEIGHT						
DL	DEAD LOAD	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	OH	OPPOSITE HAND (OR OVERHEAD)				
DN	DOWN								

PROJECT INFORMATION

APPLICABLE CODES AND STANDARDS

- A. 2015 INTERNATIONAL BUILDING CODE
B. 2015 INTERNATIONAL PLUMBING CODE
C. 2015 INTERNATIONAL MECHANICAL CODE
D. 2015 INTERNATIONAL ENERGY CONSERVATION CODES
E. 2014 NFPA 70-NATIONAL ELECTRIC CODE
F. 2012 TEXAS ACCESSIBILITY STANDARDS (TAS)
G. 2014 ICC 600 WINDSTORM

BUILDING TYPE: 1 (332) GROUP-I -Institutional

SPRINKLER SYSTEM: Yes

INTERNATIONAL EXISTING BUILDING CODE
CHAPTER 7 LEVEL 2 ALTERATIONS

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Architectural	
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M0.0	Mechanical General Information
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M2.1	Mechanical Schedules and Details
Electrical	
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E1.1	Electrical Overall Plan
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P2.1	Plumbing and Fire Protection
P3.1	Plumbing Schedules and Details
Medical Gas	
MG2.1	Medical Gas Demo and New Construction

MATERIAL LEGEND

	CONCRETE		BLOCKING OR SHIM (CONTINUOUS)
	BRICK MASONRY		BLOCKING OR SHIM (INTERMITTENT)
	CONCRETE MASONRY UNITS		RIGID INSULATION
	PLYWOOD		BATT INSULATION
	GYPSUM BOARD		

SYMBOL KEY

	DOOR NUMBER		PARTITION TYPES
	TOILET ACCESSORY		EXTERIOR ELEVATION TAG
	INTERIOR ELEVATION MARK		ROOM NAME & NUMBER
	ENLARGED DETAIL		WINDOW TYPE
	KEYNOTE		NORTH ARROW

LOCATION MAP



JAMES R. CLARK, AIA
TEXAS REG. # 8212
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CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

2830 CALDER AVENUE

ISSUED FOR
SCHEMATIC DESIGN ☒
DATE: 11-18-21
DESIGN DEVELOPMENT ☐
DATE: _
BIDS & CONSTRUCTION ☒
DATE: 5-17-22
REVISION:
DATE: _____
REVISION:
DATE: _____
REVISION:
DATE: _____

DRAWINGS SHEET TITLE
COVER SHEET

SHEET NUMBER
G001
20132
PROJECT NUMBER

302 FLOOR OR GROUND SURFACES

302.1 GENERAL. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

EXCEPTIONS:

1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.
2. Areas of sport activity shall not be required to comply with 302.

302.2 CARPET. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut, pile, or level cut/uncut pile texture. Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

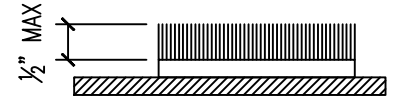


Figure 302.2 Carpet Pile Height

302.3 OPENINGS. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

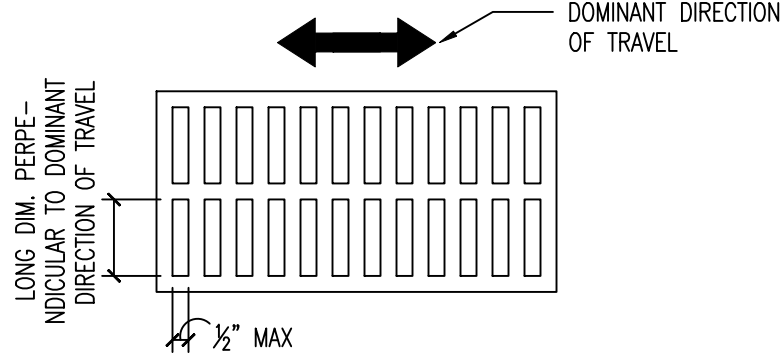


Figure 302.3 Elongated Openings in Floor or Ground Surfaces

303 CHANGE IN LEVELS

303.1 GENERAL. Where changes in level are permitted in floor or ground surfaces, they shall comply with 303.

EXCEPTIONS:

1. Animal containment areas shall not be required to comply with 303.
2. Areas of sport activity shall not be required to comply with 303.

303.2 VERTICAL. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical.

303.3 BEVELED. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

303.4 RAMPS. Changes in level greater than 1/2 inch (13 mm) high shall be ramped, and shall comply with 405 or 406.

304 TURNING SPACE

304.1 GENERAL. Turning space shall comply with 304.

304.2 FLOOR OR GROUND SURFACES. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

304.3 SIZE. Turning space shall comply with 304.3.1 or 304.3.2.

304.3.1 CIRCULAR SPACE. The turning space shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-SHAPED SPACE. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

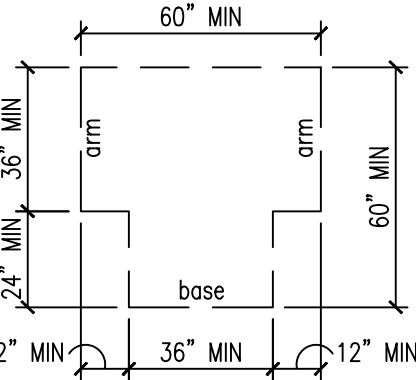


Figure 304.3.2 T-Shaped Turning Space

304.4 DOOR SWING. Doors shall be permitted to swing into turning spaces.

305 CLEAR FLOOR SPACE OR GROUND FLOOR SPACE

305.1 GENERAL. Clear floor or ground space shall comply with 305.

305.2 FLOOR OR GROUND SURFACES. Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

305.3 SIZE. The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum

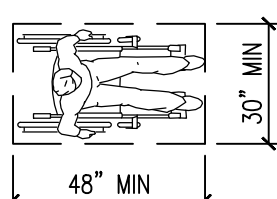


Figure 305.3 Clear Floor or Ground Space

305.4 KNEE AND TOE CLEARANCE. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.

305.5 POSITION. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

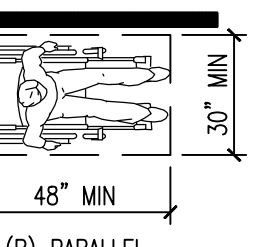
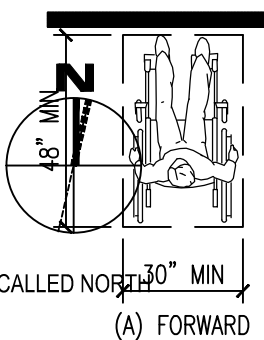


Figure 305.5 Position of Clear Floor or Ground Space

305.6 approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

305.7 MANEUVERING CLEARANCE. Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

305.7.1 FORWARD APPROACH. Alcoves shall be 36 inches (915 mm) wide minimum where the depth exceeds 24 inches (610 mm).

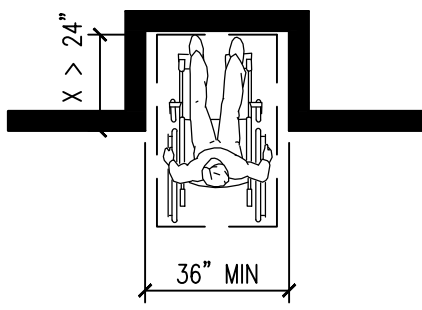


Figure 305.7.1 Maneuvering Clearance in an Alcove, Forward Approach

305.7.2 PARALLEL APPROACH. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

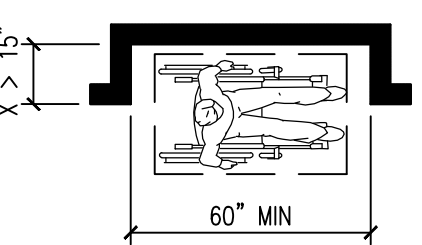
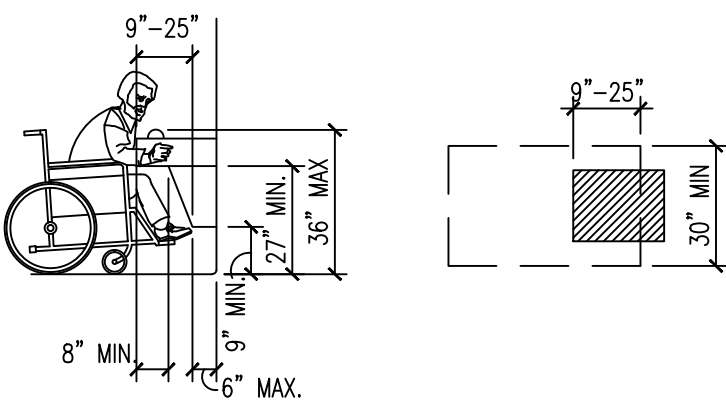


Figure 305.7.2 Maneuvering Clearance in an Alcove, Parallel Approach

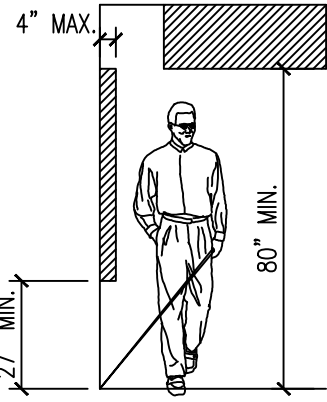
306 KNEE AND TOE CLEARANCE



307 PROTRUDING OBJECTS

307.2 PROTRUSION LIMITS. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.



307.3 POST-MOUNTED OBJECTS. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

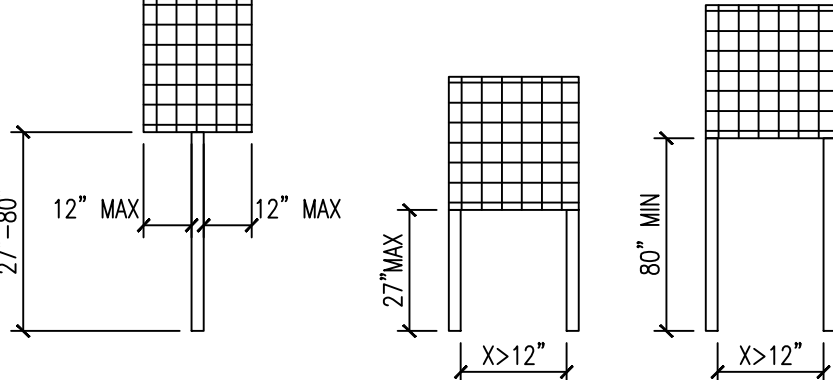


Figure 307.3 Post-Mounted Protruding Objects

307.4 VERTICAL CLEARANCE. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

308 REACH RANGE



Figure 308.2.1 Unobstructed Forward Reach

Figure 308.2.2 Obstructed High Forward Reach

308.3 SIDE REACH.

308.3.1 UNOBSTRUCTED. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

EXCEPTIONS:

1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm) maximum.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

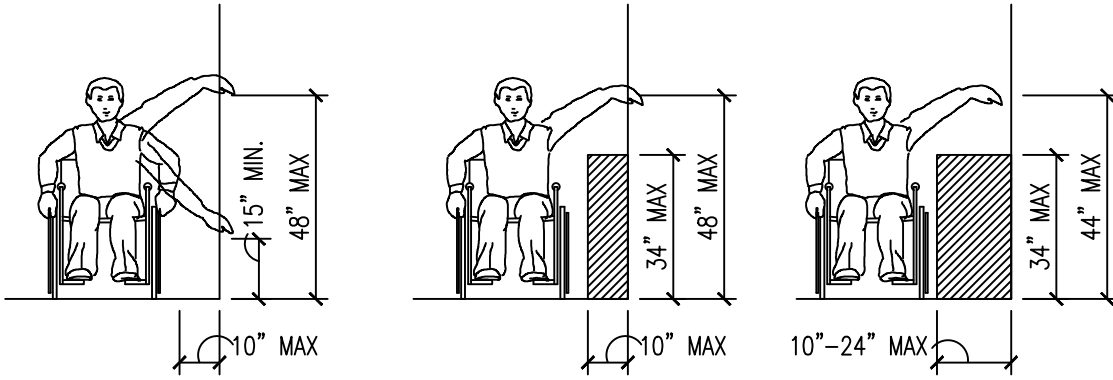


Figure 308.3.1 Unobstructed Side Reach

Figure 308.3.2 Obstructed High Side Reach

308.3.2 OBSTRUCTED HIGH REACH. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

EXCEPTIONS:

1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

309 OPERABLE PARTS

309.4 OPERATION. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

EXCEPTION: Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.

402 ACCESSIBLE ROUTES

402.2 COMPONENTS. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

403 WALKING SURFACE

403.3 SLOPE. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.5 CLEARANCES. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 CLEAR WIDTH. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

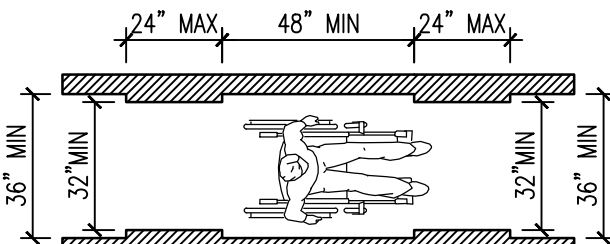


Figure 403.5.1 Clear Width of an Accessible Route

403.5.2 CLEAR WIDTH AT TURN. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.

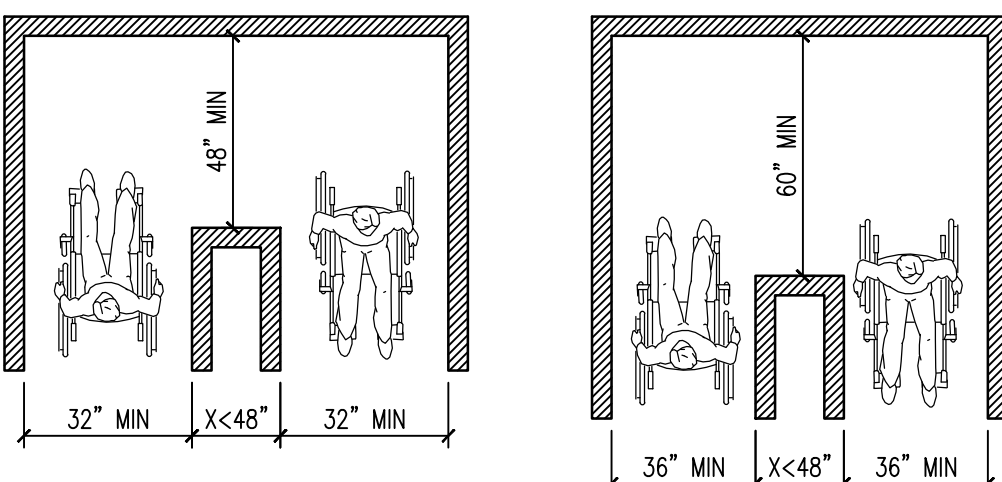


Figure 403.5.2 Clear Width at Turn

Figure 403.5.2 Clear Width at Turn (EXCEPTION)

403.5.3 PASSING SPACES. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

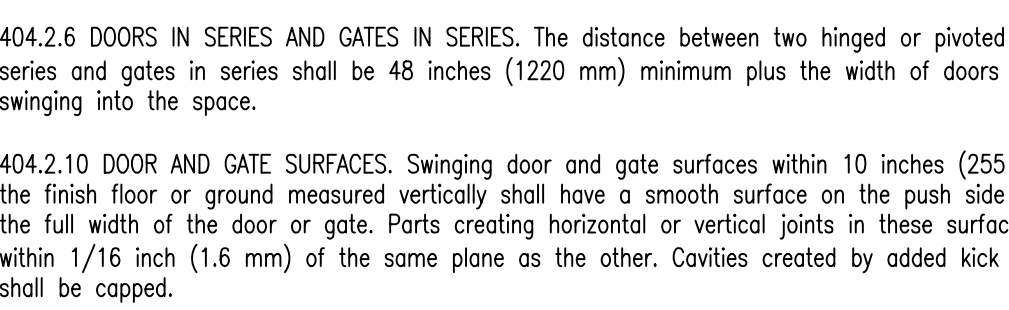
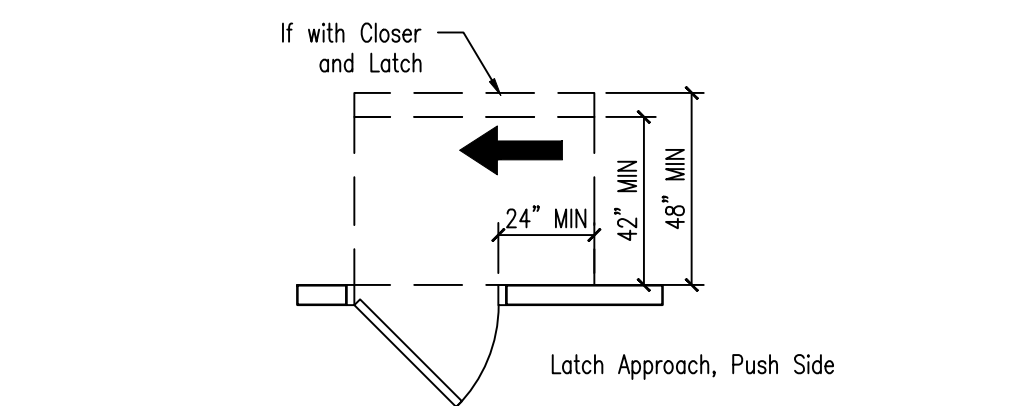
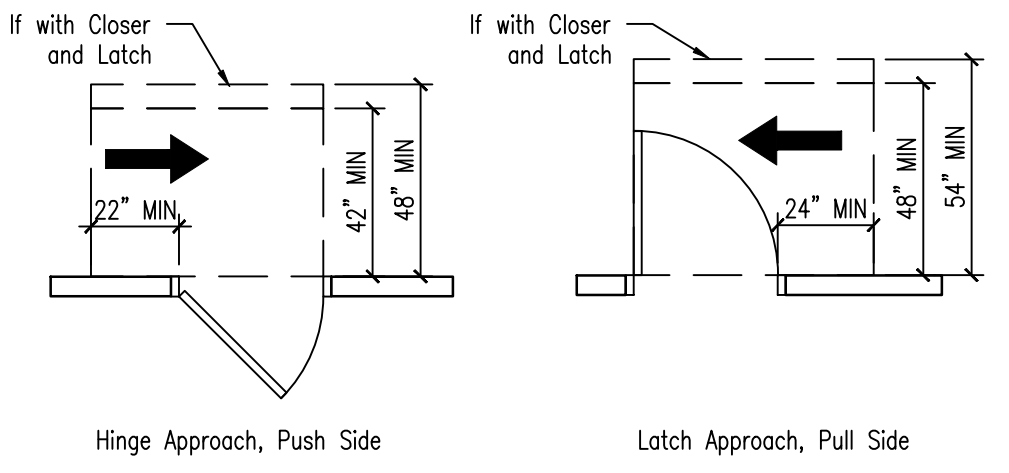
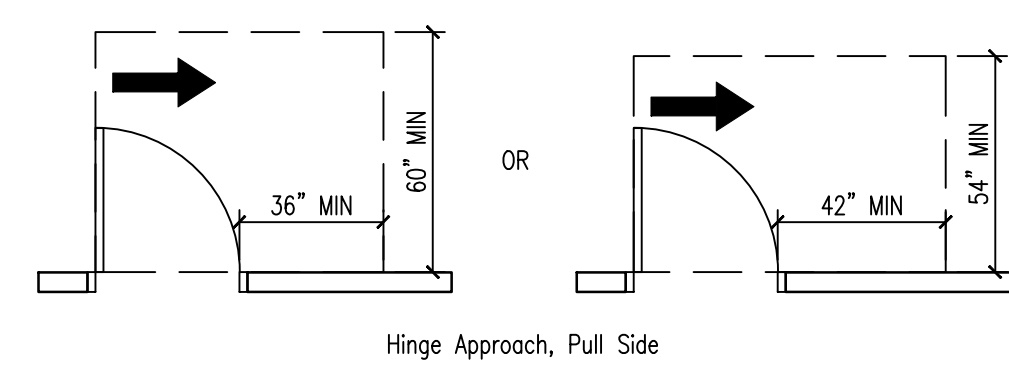
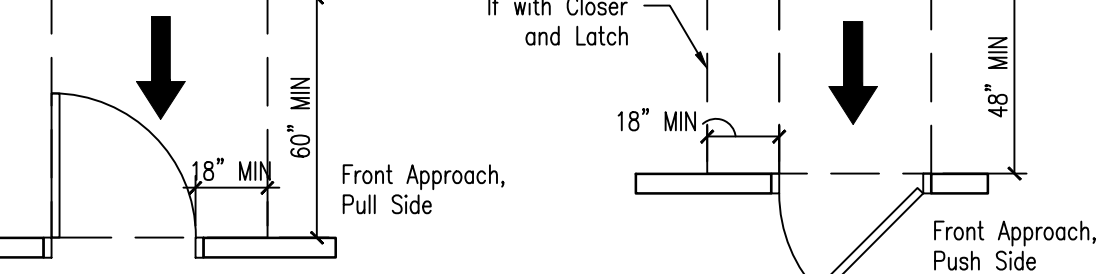
404 DOORS, DOORWAYS, AND GATES

404.2.3 CLEAR WIDTH. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

EXCEPTIONS:

1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.

2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.



405 RAMPS

405.2 SLOPE. Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

1:8 SLOPE = 3" Maximum Rise
1:10 SLOPE = 6" Maximum Rise

405.3 CROSS SLOPE. Cross slope of ramp runs shall not be steeper than 1:48.

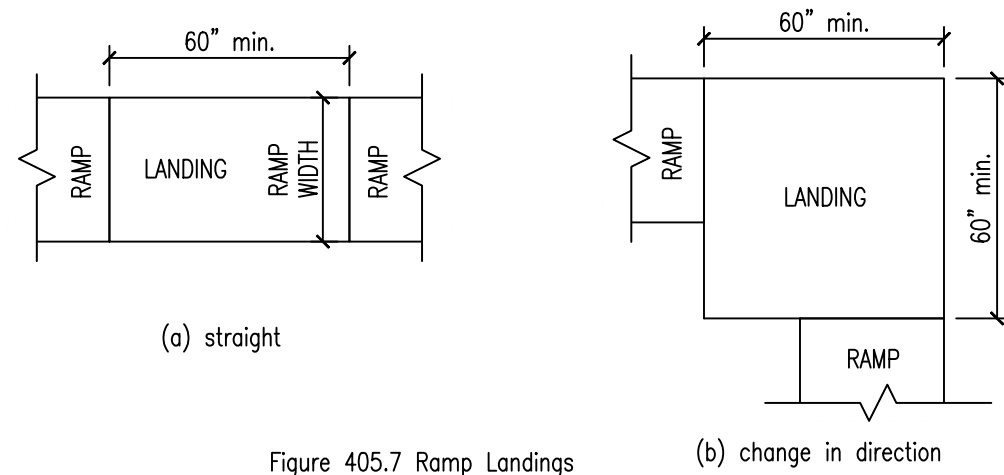


Figure 405.7 Ramp Landings

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4-inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

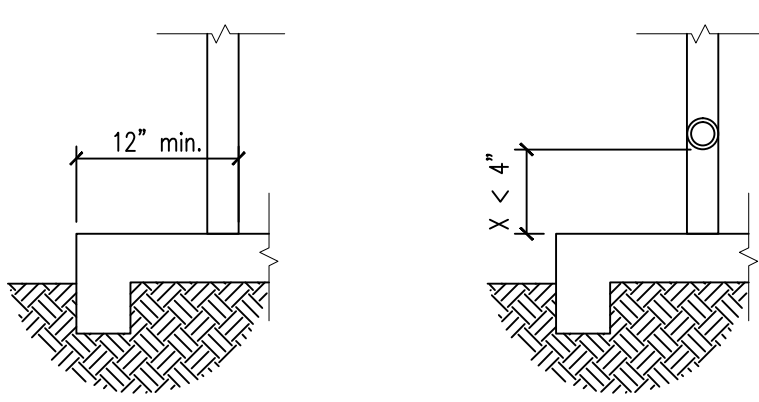


Figure 405.9.1 Extended Floor or Ground Surface Protection

Figure 405.9.2 Curb or Barrier Edge Protection

406 CURB RAMPS

406.1 GENERAL. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 COUNTER SLOPE. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.



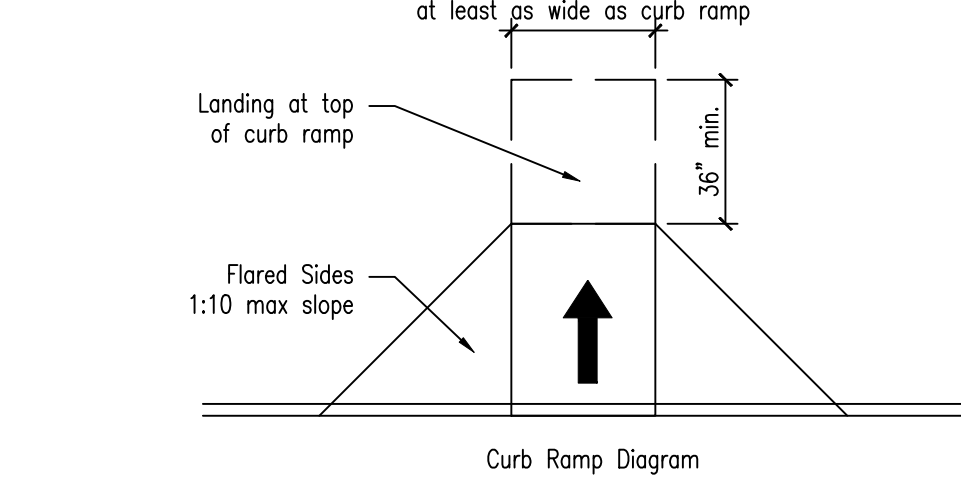
Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 SIDES OF CURB RAMPS. Where provided, curb ramp flares shall not be steeper than 1:10.

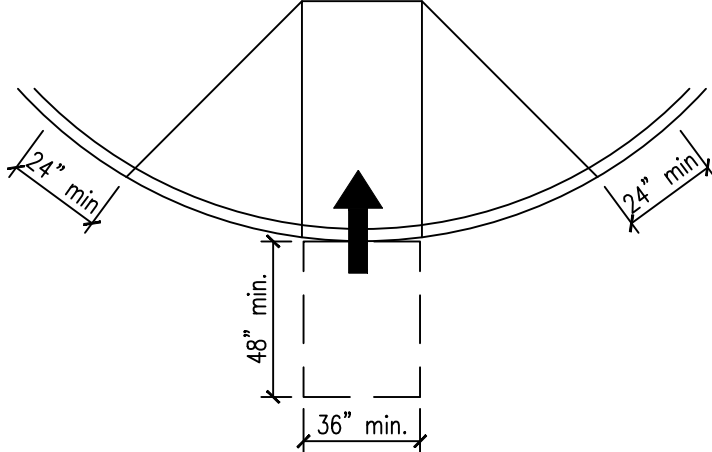
406.4 LANDINGS. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

EXCEPTION: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

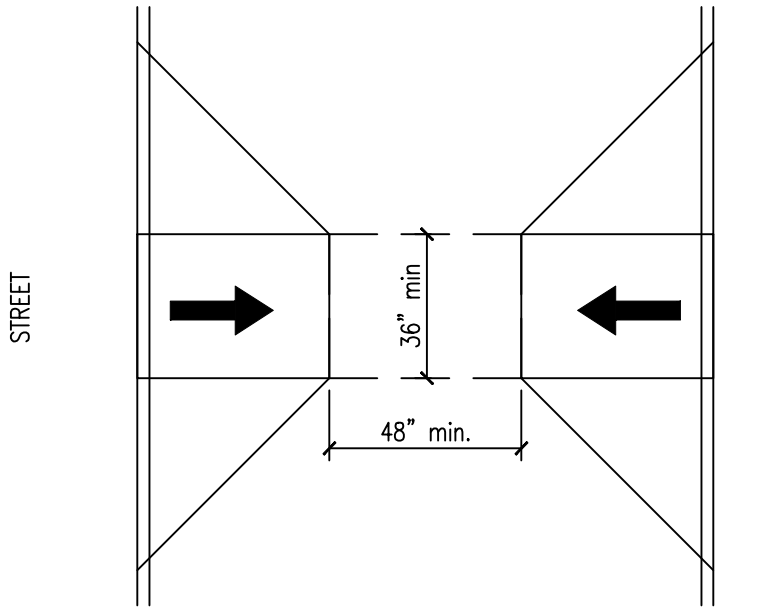
406.5 LOCATION. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.



406.6 DIAGONAL CURB RAMPS. Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.



406.7 ISLANDS. Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area and the accessible route shall be permitted to overlap.



502 PARKING SPACES

502.2 VEHICLE SPACES. Car parking spaces shall be 96 inches (2440 mm) wide minimum and van parking spaces shall be 132 inches (3350 mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3.

EXCEPTION: Van parking spaces shall be permitted to be 96 inches (2440 mm) wide minimum where the access aisle is 96 inches (2440 mm) wide minimum.

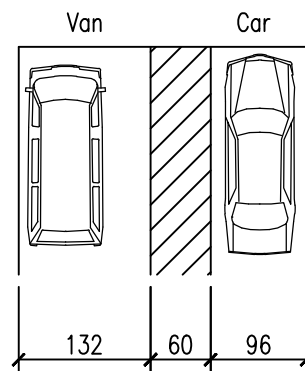


Figure 502.2 Vehicle Parking Spaces

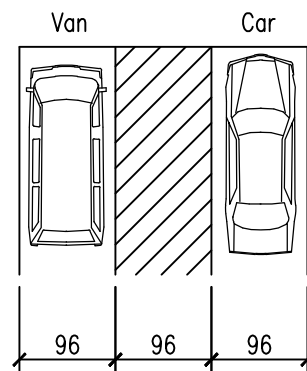


Figure 502.2 Vehicle Parking Spaces (Exception)

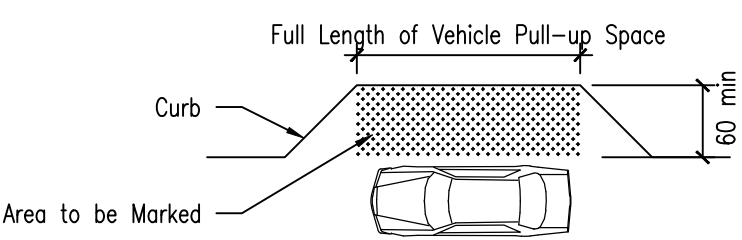
502.3.4 LOCATION. Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space except for angled van parking spaces which shall have access aisles located on the passenger side of the parking spaces.

502.5 VERTICAL CLEARANCE. Parking spaces for vans and access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2490 mm) minimum.

502.6 IDENTIFICATION. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

503 PASSENGER LOADING ZONES

503.2 VEHICLE PULL-UP SPACE. Passenger loading zones shall provide a vehicular pull-up space 96 inches (2440 mm) wide minimum and 20 feet (6100 mm) long minimum.



504 STAIRWAYS

504.2 TREADS AND RISERS. All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches (100 mm) high minimum and 7 inches (180 mm) high maximum. Treads shall be 11 inches (280 mm) deep minimum.

504.3 OPEN RISERS. Open risers are not permitted.

504.4 TREAD SURFACE. Stair treads shall comply with 302. Changes in level are not permitted.

EXCEPTION: Treads shall be permitted to have a slope not steeper than 1:48.

504.5 NOSINGS. The radius of curvature at the leading edge of the tread shall be 1/2 inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1 1/2 inches (38 mm) maximum over the tread below.

505 HANDRAILS

505.2 WHERE REQUIRED. Handrails shall be provided on both sides of stairs and ramps.

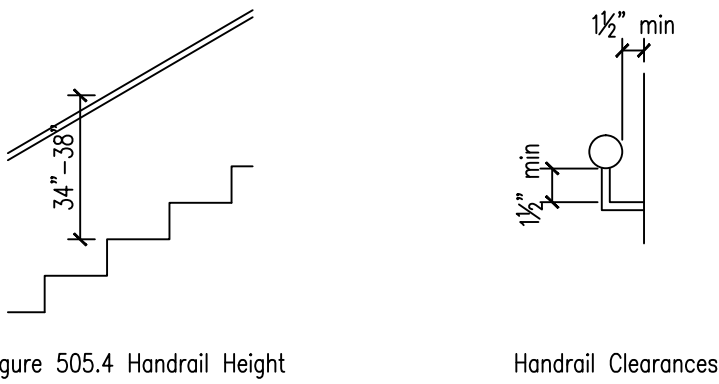
EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.

505.3 CONTINUITY. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

EXCEPTION: In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating.

505.4 HEIGHT. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

505.5 CLEARANCE. Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum.



505.6 GRIPPING SURFACE. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

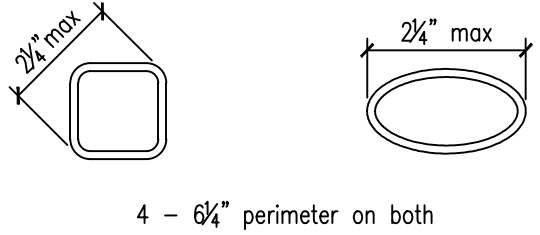
EXCEPTIONS:

1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.

2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch (3.2 mm) for each 1/2 inch (13 mm) of additional handrail perimeter dimension that exceeds 4 inches (100 mm).

505.7.1 CIRCULAR CROSS SECTION. Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

505.7.2 NON-CIRCULAR CROSS SECTIONS. Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches (100 mm) minimum and 6 1/4 inches (160 mm) maximum, and a cross-section dimension of 2 1/4 inches (57 mm) maximum.



4 - 6 1/4" perimeter on both

505.10.1 TOP AND BOTTOM EXTENSION AT RAMPS. Ramp handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.

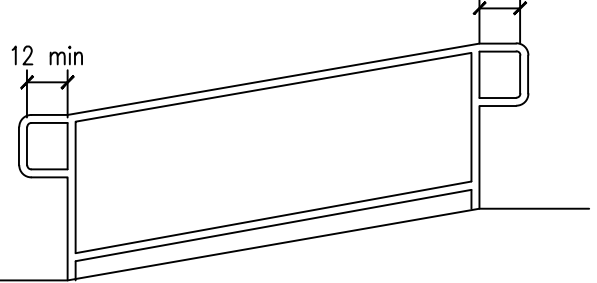
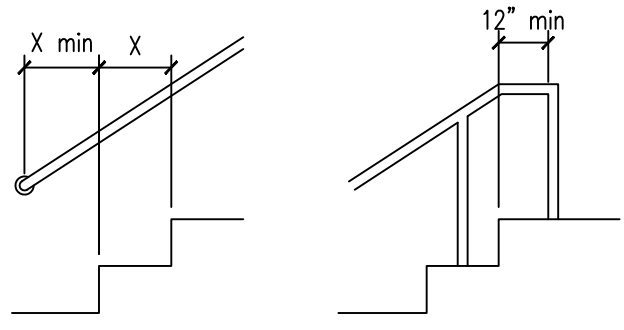


Figure 505.10.1 Top and Bottom Handrail Extension at Ramps

505.10.2 TOP EXTENSION AT STAIRS. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

505.10.3 BOTTOM EXTENSION AT STAIRS. At the bottom of a stair flight, handrails shall extend at the top of the stair flight for a horizontal distance of at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.



Top and Bottom Handrail Extension at Stairs

602 DRINKING FOUNTAINS

602.2 CLEAR FLOOR SPACE. Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided.

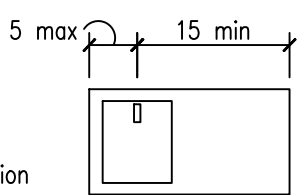


Figure 602.5 Drinking Fountain Spout Location

602.6 WATER FLOW. The spout shall provide a flow of water 4 inches (100 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

602.7 DRINKING FOUNTAINS FOR STANDING PERSONS. Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the finish floor or ground.

603 TOILET AND BATHING ROOMS

603.2.2 OVERLAP. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

603.2.3 DOOR SWING. Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

EXCEPTIONS:

1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3.

2. Where the toilet room or bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

603.3 MIRRORS. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

603.4 COAT HOOKS AND SHELVES. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

604 WATER CLOSETS AND TOILET COMPARTMENTS

604.2 LOCATION. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) minimum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

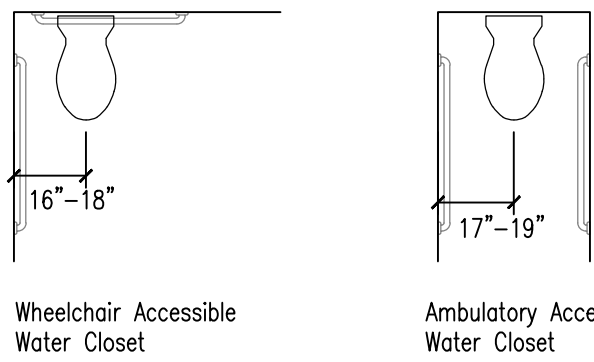


Figure 604.3.1 Size of Clearance at Water Closets

Ambulatory Accessible Water Closet

604.3.1 Size. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

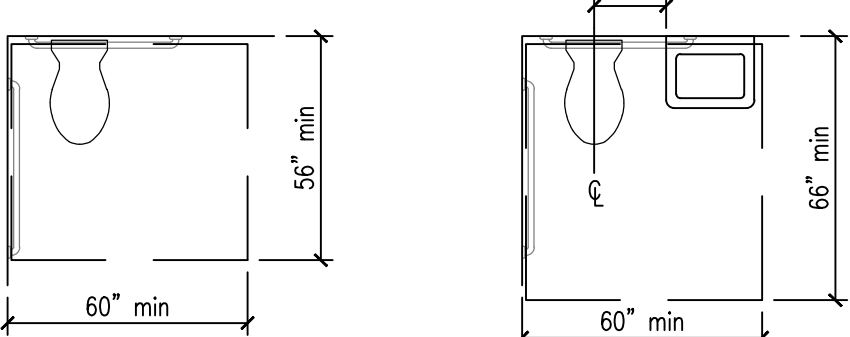


Figure 604.3.2 (Exception) Overlap of Water Closet Clearance in Residential Dwelling Units

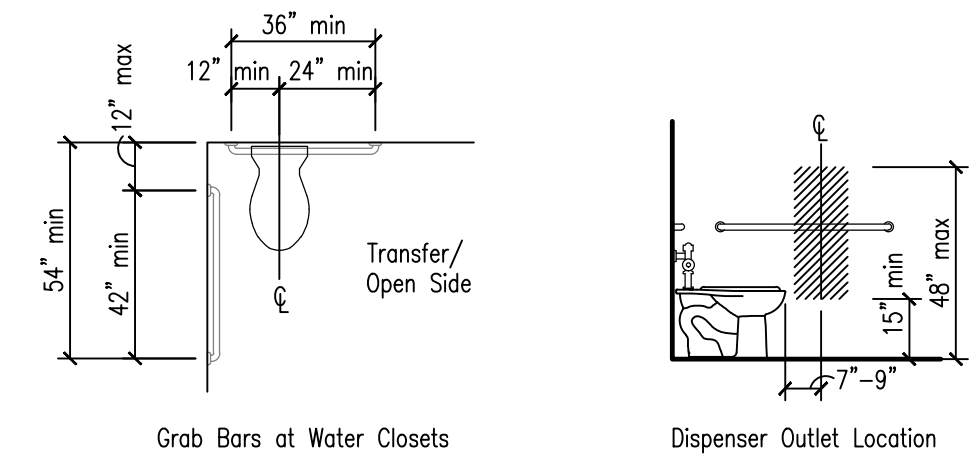


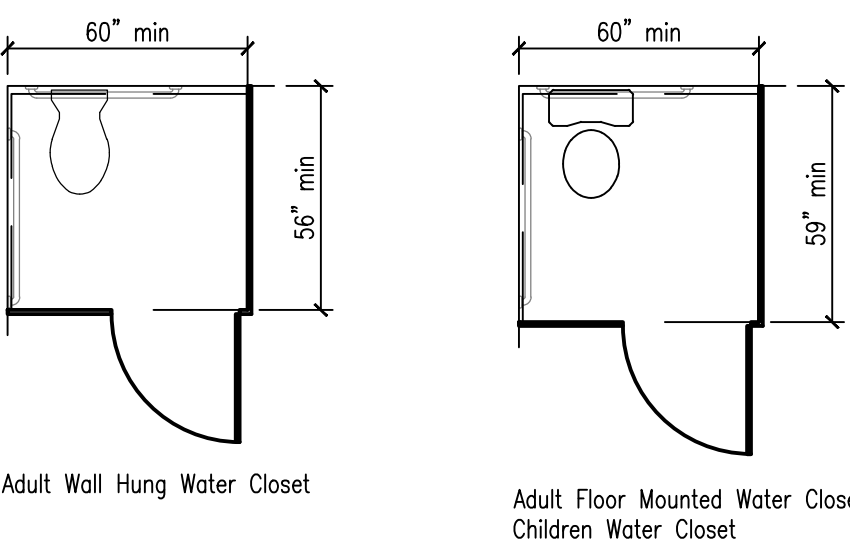
Figure 605.2 Height and Depth of Urinals

EXCEPTIONS:

1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

604.7 DISPENSERS. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.



Adult Wall Hung Water Closet

Adult Floor Mounted Water Closet/Children Water Closet

604.8.1.2 DOORS. Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

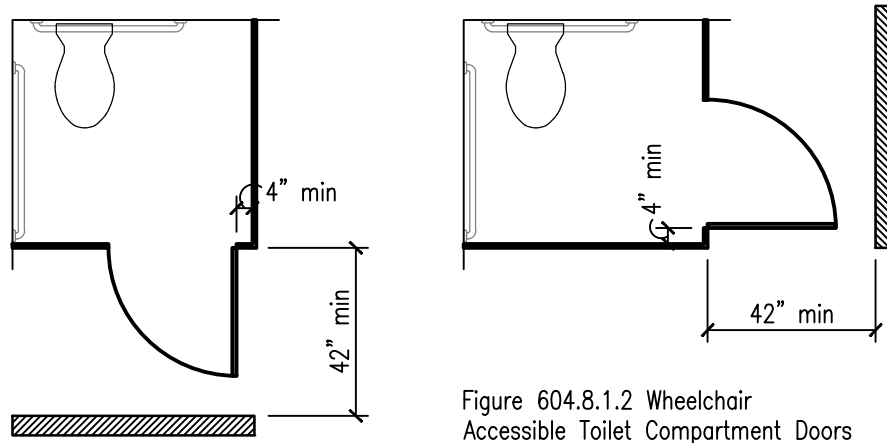
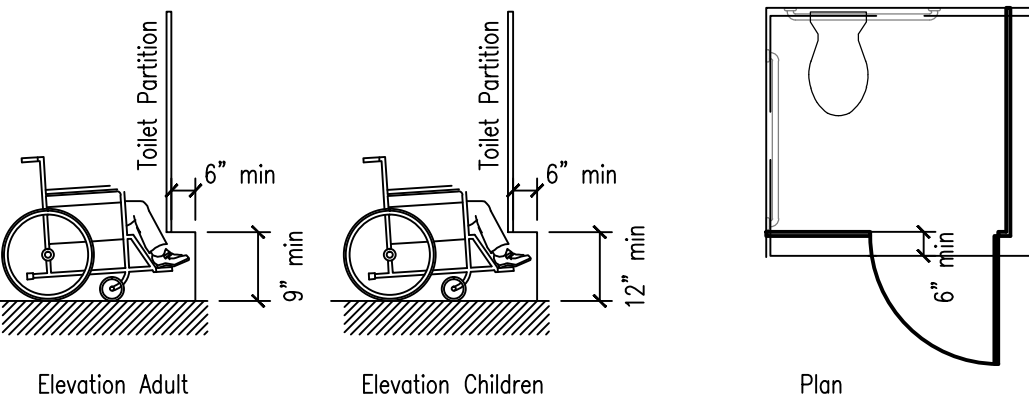


Figure 604.8.1.2 Wheelchair Accessible Toilet Compartment Doors

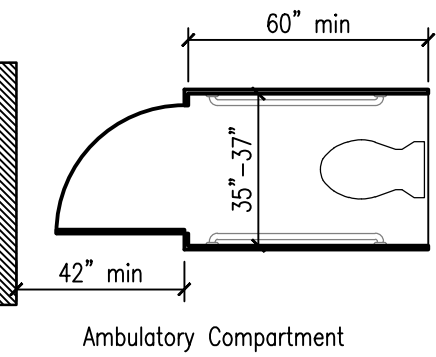
604.8.1.4 TOE CLEARANCE. The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

EXCEPTION: Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1650 mm) deep.



604.8.2.1 SIZE. Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

604.8.2.2 DOORS. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.



Ambulatory Compartment

605.2 HEIGHT AND DEPTH. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13 1/2 inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

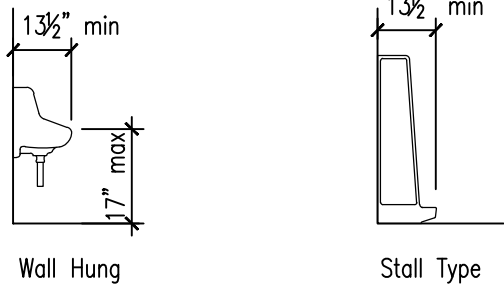


Figure 605.2 Height and Depth of Urinals

606 LAVATORIES AND SINKS

606.2 CLEAR FLOOR SPACE. A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

EXCEPTIONS:

1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.

2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with 306.

3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:

- (a) the cabinetry can be removed without removal or replacement of the fixture;
- (b) the finish floor extends under the cabinetry; and
- (c) the walls behind and surrounding the cabinetry are finished.

4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (785 mm) maximum above the finish floor or ground.

5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.

6. The dip of the overflow shall not be considered in determining knee and toe clearances.

7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

606.3 HEIGHT. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

606.4 FAUCETS. Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

607 BATHTUBS

607.2 CLEARANCE. Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches (760 mm) wide minimum. A lavatory complying with 606 shall be permitted at the control end of the clearance. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

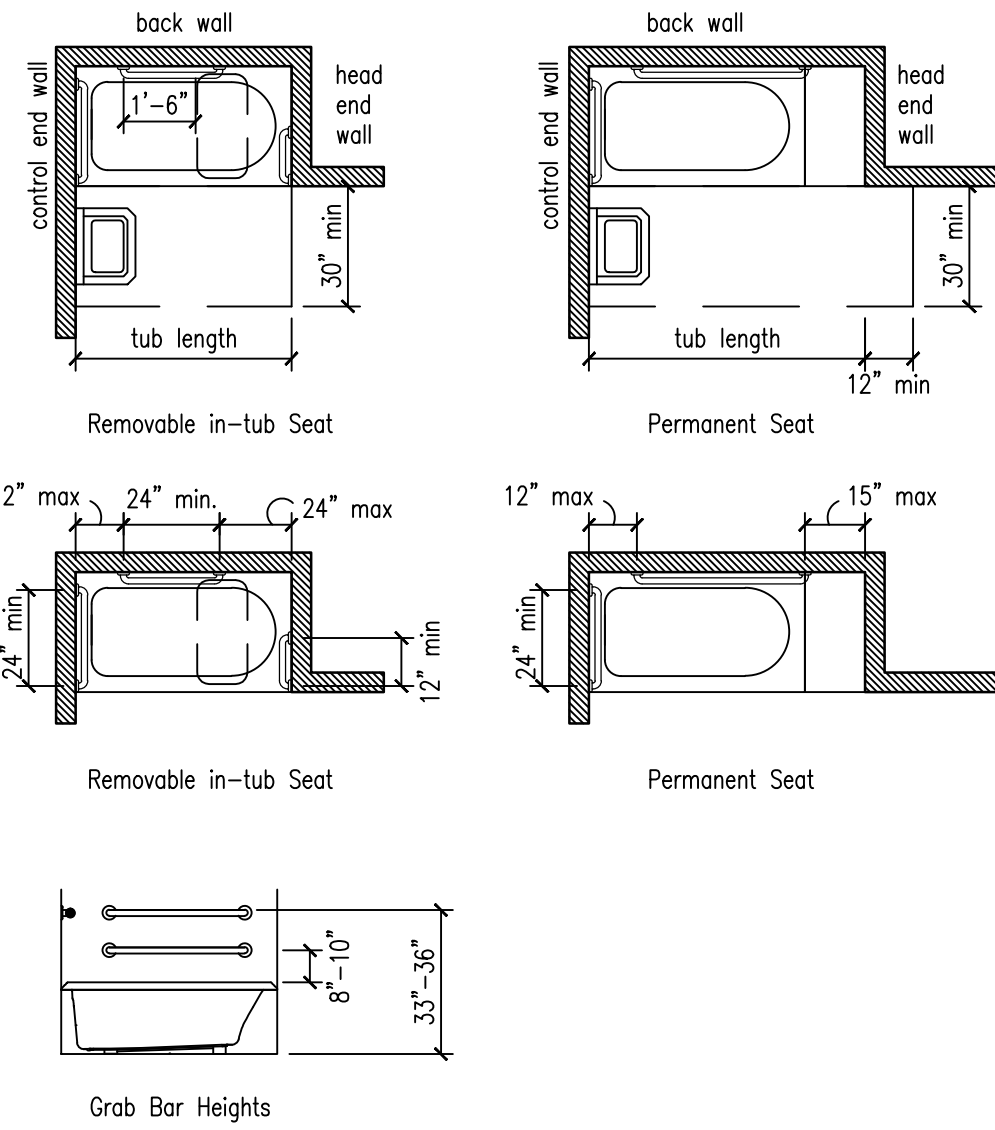
607.3 SEAT. A permanent seat at the head end of the bathtub or a removable in-tub seat shall be provided. Seats shall comply with 610.

607.4 GRAB BARS. Grab bars for bathtubs shall comply with 609 and shall be provided in accordance with 607.4.1 or 607.4.2.

607.4.1 BATHTUBS WITH PERMANENT SEATS. For bathtubs with permanent seats, grab bars shall be provided in accordance with 607.4.1.

607.4.1.1 BACK WALL. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches (380 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

607.4.1.2 CONTROL END WALL. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.



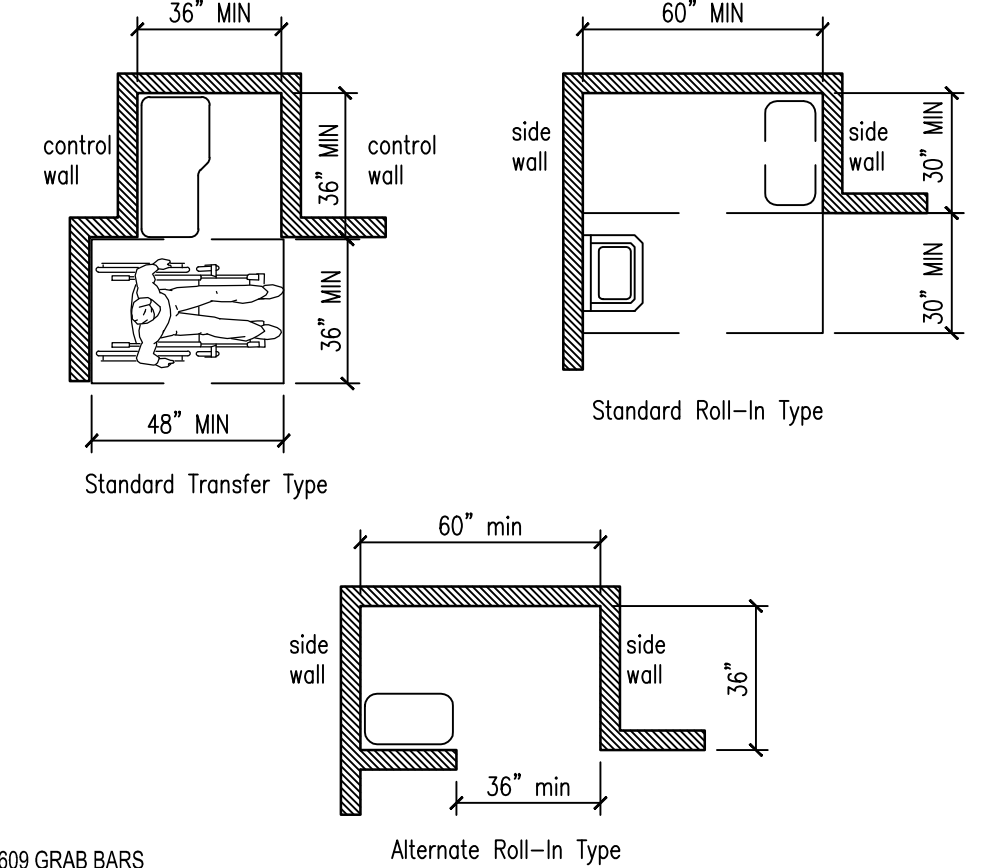
Grab Bar Heights

607.5 CONTROLS. Controls, other than drain stoppers, shall be located on an end wall. Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the rim of the bathtub. Controls shall comply with 309.4.

607.6 SHOWER SPRAY UNIT AND WATER. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Bathtub shower spray units shall deliver water that is 120°F (49°C) maximum.

608 SHOWER COMPARTMENTS

608.2.1 TRANSFER TYPE SHOWER COMPARTMENTS. Transfer type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch (915 mm) wide minimum entry on the face of the shower compartment. Clearance of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.



609 GRAB BARS

609.2.1 CIRCULAR CROSS SECTION. Grab bars with circular cross sections shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

609.2.2 NON-CIRCULAR CROSS SECTION. Grab bars with non-circular cross sections shall have a cross-section dimension of 2 inches (51 mm) minimum and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 inches (120 mm) maximum.

609.3 SPACING. The space between the wall and the grab bar shall be 1 1/2 inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

609.4 POSITION OF GRAB BARS. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1.

609.5 SURFACE HAZARDS. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 FITTINGS. Grab bars shall not rotate within their fittings.

609.7 INSTALLATION. Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

609.8 STRUCTURAL STRENGTH. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

610 SEATS

610.2 BATHTUB SEATS. The top of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. The depth of a removable in-tub seat shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum. The seat shall be capable of secure placement. Permanent seats at the head end of the bathtub shall be 15 inches (380 mm) deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.

610.3 SHOWER COMPARTMENT SEATS. Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall, and shall extend from the adjacent side wall to a point within 3 inches (75 mm) of the compartment entry. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. The top of the seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. Seats shall comply with 610.3.1 or 610.3.2.

610.3.1 RECTANGULAR SEATS. The rear edge of a rectangular seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The side edge of the seat shall be 1 1/2 inches (38 mm) maximum from the adjacent wall.

610.3.2 L-SHAPED SEATS. The rear edge of an L-shaped seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The rear edge of the "L" portion of the seat shall be 1 1/2 inches (38 mm) maximum from the wall and the front edge shall be 14 inches (355 mm) minimum and 15 inches (380 mm) maximum from the wall. The end of the "L" shall be 22 inches (560 mm) minimum and 23 inches (585 mm) maximum from the main seat wall.

702 FIRE ALARM SYSTEMS

702.1 GENERAL. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification devices shall comply with sections 7.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION: Fire alarm systems in medical care facilities shall be permitted to be provided in accordance with industry practice.

703 SIGNS

703.1 GENERAL. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2 RAISED CHARACTERS. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

703.2.1 DEPTH. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

703.2.2 CASE. Characters shall be uppercase.

703.2.3 STYLE. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4 CHARACTER PROPORTIONS. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.2.5 CHARACTER HEIGHT. Character height measured vertically from the baseline of the character shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

703.2.6 STROKE THICKNESS. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character. 703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

703.2.8 LINE SPACING. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3 BRAILLE. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 DIMENSIONS AND CAPITALIZATION. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

705 DETECTABLE WARNINGS

705.1.1 DOME SIZE. Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inch (23 mm) minimum and 1.4 inches (36 mm) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 0.2 inch (5.1 mm).

705.1.2 DOME SPACING. Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches (41 mm) minimum and 2.4 inches (61 mm) maximum, and a base-to-base spacing of 0.65 inch (17 mm) minimum, measured between the most adjacent domes on a square grid.

705.1.3 CONTRAST. Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light-on-dark, or dark-on-light.

708 TWO-WAY COMMUNICATION SYSTEMS

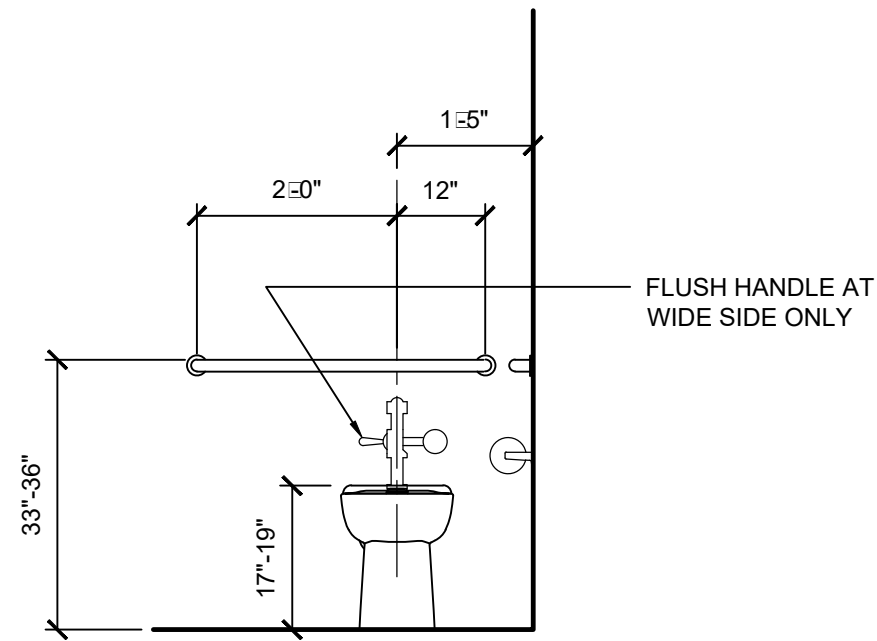
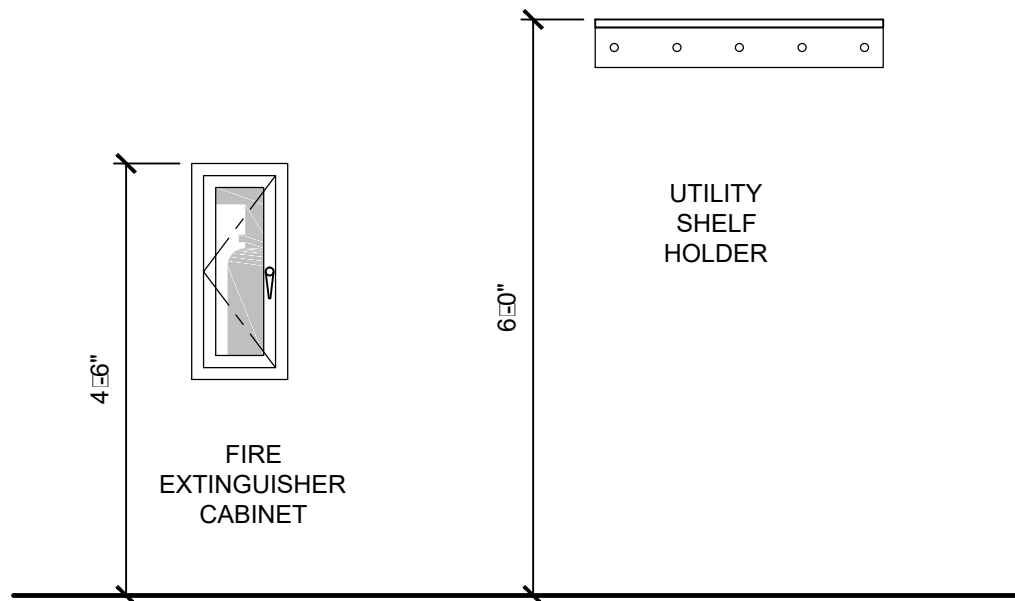
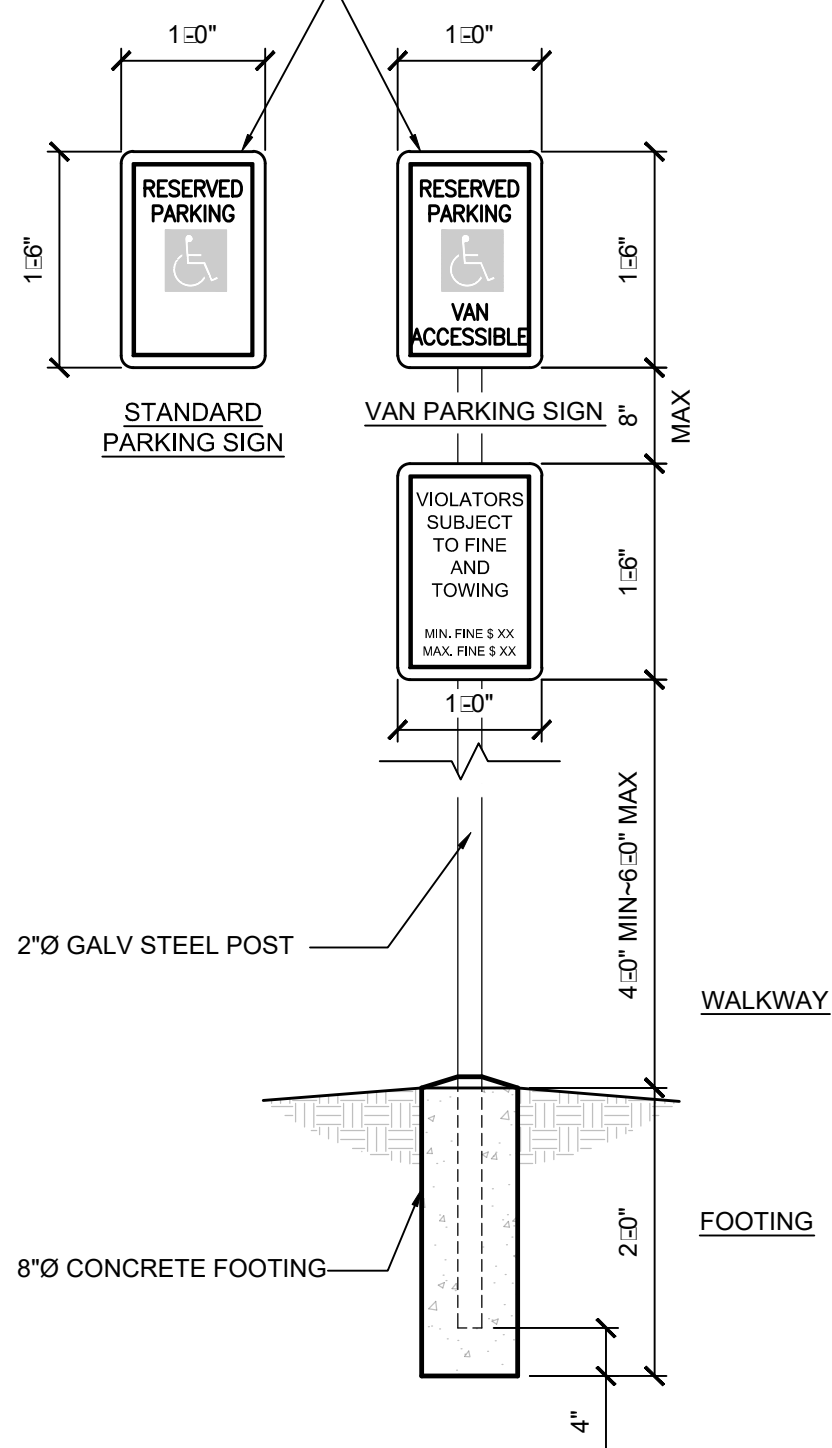
708.3 HANDSETS. Handset cords, if provided, shall be 29 inches (735 mm) long minimum.

708.4 RESIDENTIAL DWELLING UNIT COMMUNICATION SYSTEMS. Communications systems between a residential dwelling unit and a site, building, or floor entrance shall comply with 708.4.

708.4.1 COMMON USE OR PUBLIC USE SYSTEM INTERFACE. The common use or public use system interface shall include the capability of supporting voice and TTY communication with the residential dwelling unit interface.

708.4.2 RESIDENTIAL DWELLING UNIT INTERFACE. The residential dwelling unit system interface shall include a telephone jack capable of supporting voice and TTY communication with the common use or public use system interface.

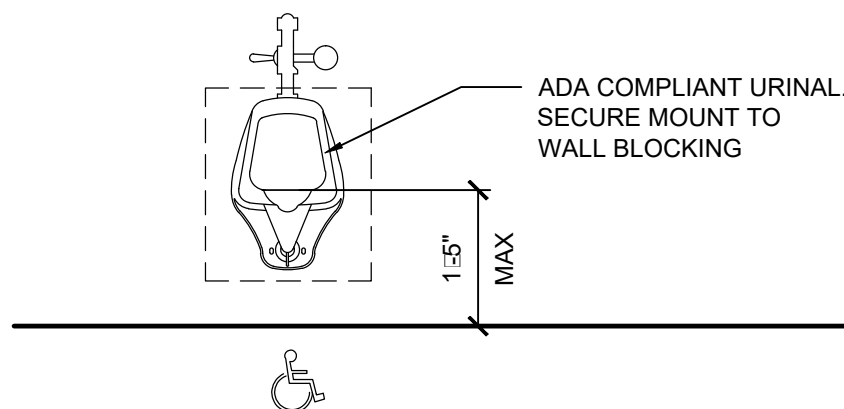
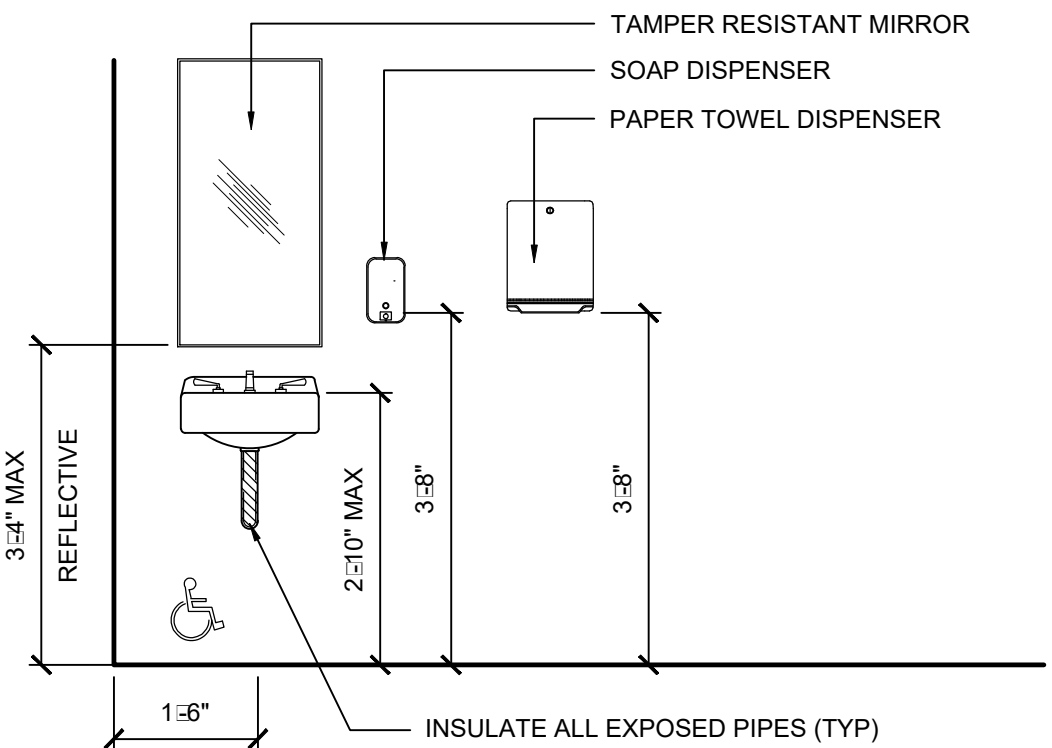
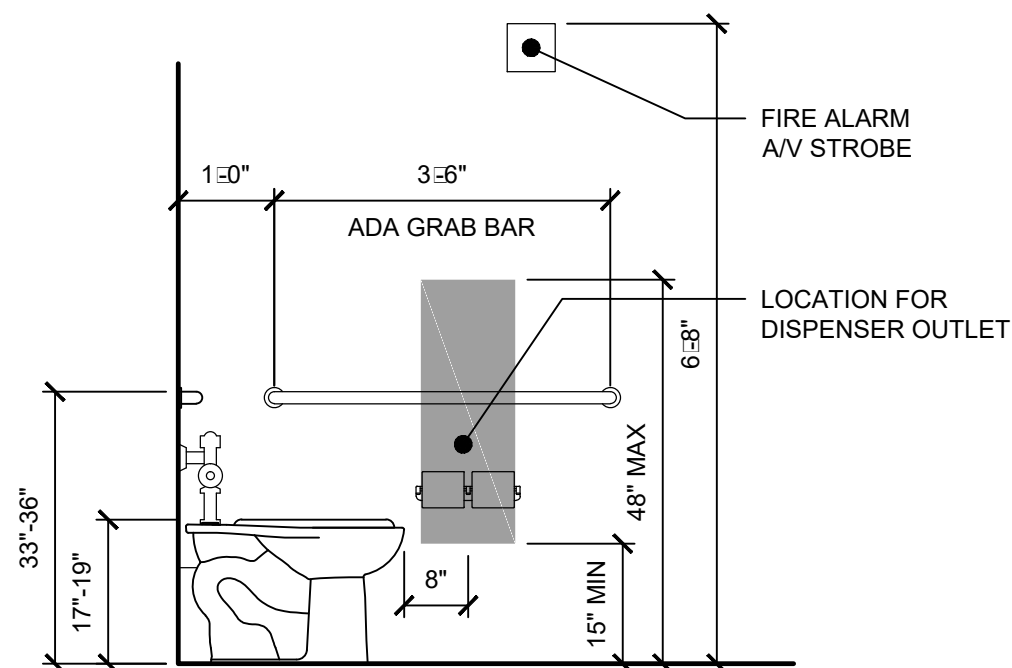
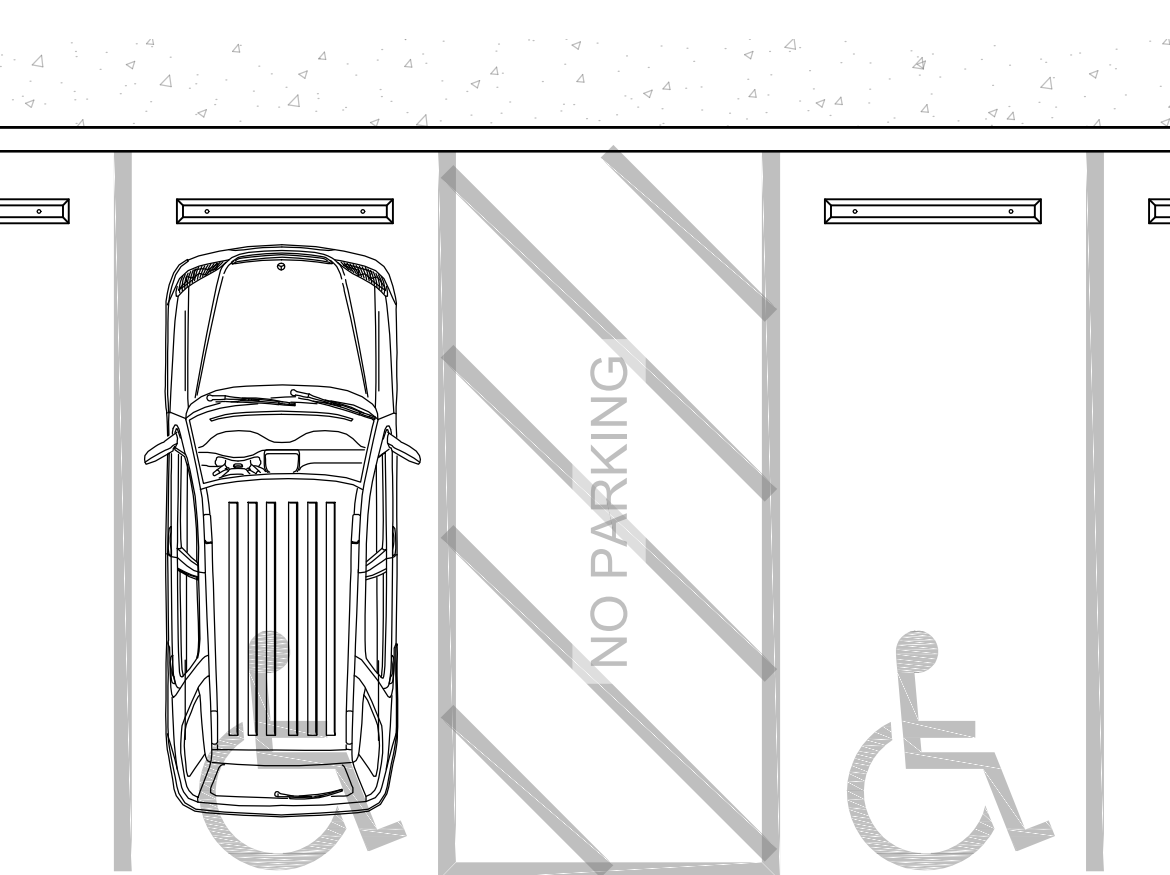
STANDARD METAL SIGN WITH
HANDICAP SYMBOL, TEXT IN
BLUE ON WHITE BACKGROUND,
BOLTED TO POST



SIGN TO BE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT & THE TEXAS
DEPARTMENT OF LICENSING & REGULATION ARCHITECTURAL BARRIERS ACT #9102

SIGNAGE TO BE DONE BY A PROFESSIONAL SIGN MANUFACTURER

SIGN AT VAN PARKING SPACE TO BE MARKED TO INDICATE THAT SPACE IS VAN ACCESSIBLE



ACCESSIBLE PARKING SPACES

(a) a paved accessible parking space must include:

- (1) the international symbol of access painted conspicuously on the surface in a color that contrasts the pavement;
- (2) the words "NO PARKING" painted on any access aisle adjacent to the parking space. The words must be painted:

- (A) In all capital letters;
- (B) with a letter height of at least one foot, and a stroke width of at least two inches;
- (C) centered within each access aisle adjacent to the parking space;

(3) a sign identifying the consequences of parking illegally in a paved accessible parking space. The sign must:

- (A) at a minimum state "Violators Subject to Fine and Towing" in a letter height of at least one inch;
- (B) be mounted on a pole, post, wall or freestanding board;
- (C) be no more than eight inches below a sign required by Texas Accessibility Standards, 502.6; and
- (D) be installed so that the bottom edge of the sign is no lower than 4 feet and no higher than 6 feet above ground level.

(b) a sign that meets the requirements set in Texas Accessibility Standards, 502.6 that includes the required language in subsection (a)(3)(A) satisfies this section.

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

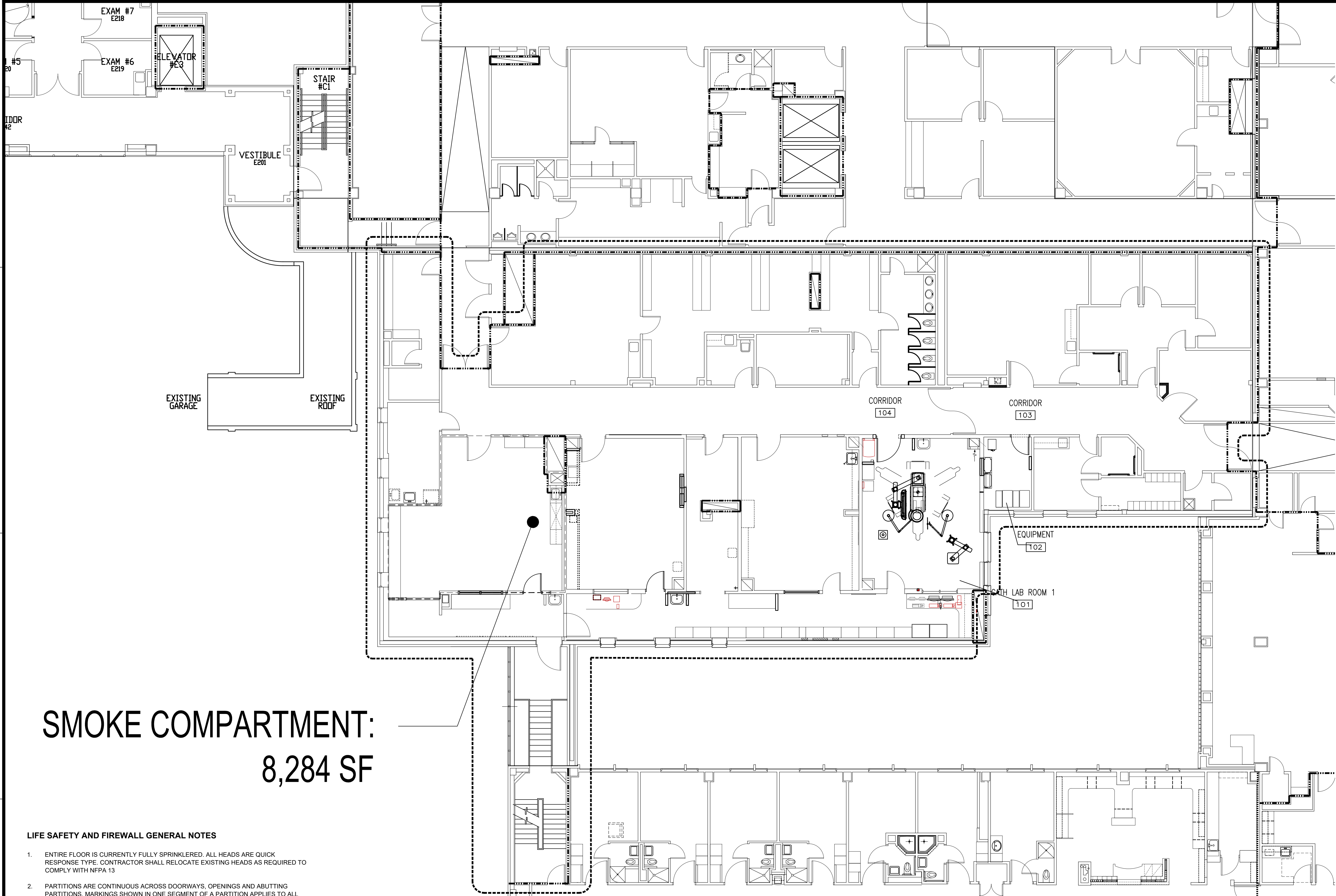
2830 CALDER AVENUE

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DATE: .	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 5-17-22	
REVISION:	
DATE:	
REVISION:	
DATE:	
REVISION:	
DATE:	

DRAWINGS SHEET TITLE
TEXAS
ACCESSIBILITY
SHEET

SHEET NUMBER
G102

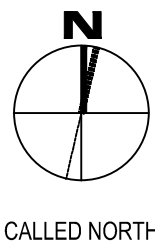
20132
PROJECT NUMBER



SMOKE COMPARTMENT:
8,284 SF

LIFE SAFETY AND FIREWALL GENERAL NOTES

- ENTIRE FLOOR IS CURRENTLY FULLY SPRINKLERED. ALL HEADS ARE QUICK RESPONSE TYPE. CONTRACTOR SHALL RELOCATE EXISTING HEADS AS REQUIRED TO COMPLY WITH NFPA 13
- PARTITIONS ARE CONTINUOUS ACROSS DOORWAYS. OPENINGS AND ABUTTING PARTITIONS. MARKINGS SHOWN IN ONE SEGMENT OF A PARTITION APPLIES TO ALL UNMARKED SEGMENTS THAT ARE IN LINE WITH AND CONTINUOUS WITH THE TAGGED SEGMENT.
- RATED WALLS AND PARTITIONS EXTEND THRU THE CEILING TO THE STRUCTURE ABOVE. PARTITIONS SHALL EXTEND TO THE DECK AND BE PROFILED TO FIT NEATLY AROUND FRAMING MEMBERS WITHIN 1/2". JOINTS TO BE SEALED ALONG THE ENTIRE LENGTH. PORTIONS OF THE PARTITIONS ABOVE THE CEILING ARE CONTINUOUS, WITHOUT OPENINGS OTHER THAN THOSE REQUIRED FOR PENETRATION OF SERVICES.
- WHERE WALL OR PARTITIONS WITH DIFFERENT RATINGS INTERSECT, ASSEMBLIES WITH HIGHER RATINGS HAVE PRIORITY. SMOKE PARTITIONS HAVE PRIORITY OVER FIRE PARTITIONS OF EQUAL RATING. FIRE RATINGS HAVE PRIORITY OVER ACOUSTIC RATINGS. CONSTRUCTION PARTITION SUCH THAT THE HIGHER RATED ASSEMBLY IS CONTINUOUS THRU THE INTERSECTION.
- CONTRACTOR SHALL PATCH AND SEAL ALL PENETRATIONS AND/OR OPENING IN ALL FIRE WALLS AND CORRIDOR PARTITIONS. FIELD VERIFY PRIOR TO BID.

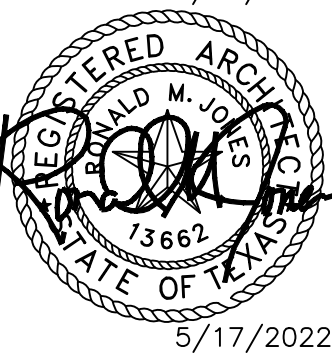


1 LIFE SAFETY
SCALE: 1/8" = 1'-0"

LEGEND

- EXISTING 2 HOUR FIRE PARTITION
- EXISTING 2 HOUR FIRE AND SMOKE
- EXISTING 1 HOUR FIRE PARTITION
- EXISTING 1 HOUR FIRE AND SMOKE

- 1 HOUR FIRE SMOKE
20 Min. Closer, S Damper
- 2 HOUR FIRE SMOKE
Positive Latch, 90 Min B-Label, Closer, F/S Damper
- 2 HOUR FIRE
Positive Latch, 90 Min B-Label, Closer, F/S Damper
- SMOKE RESISTANT
Positive Latch, No Closer, No Damper
- SMOKE RESISTANT HAZARD
Positive Latch, 45 Min C-Label, Closer, No Damper



CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

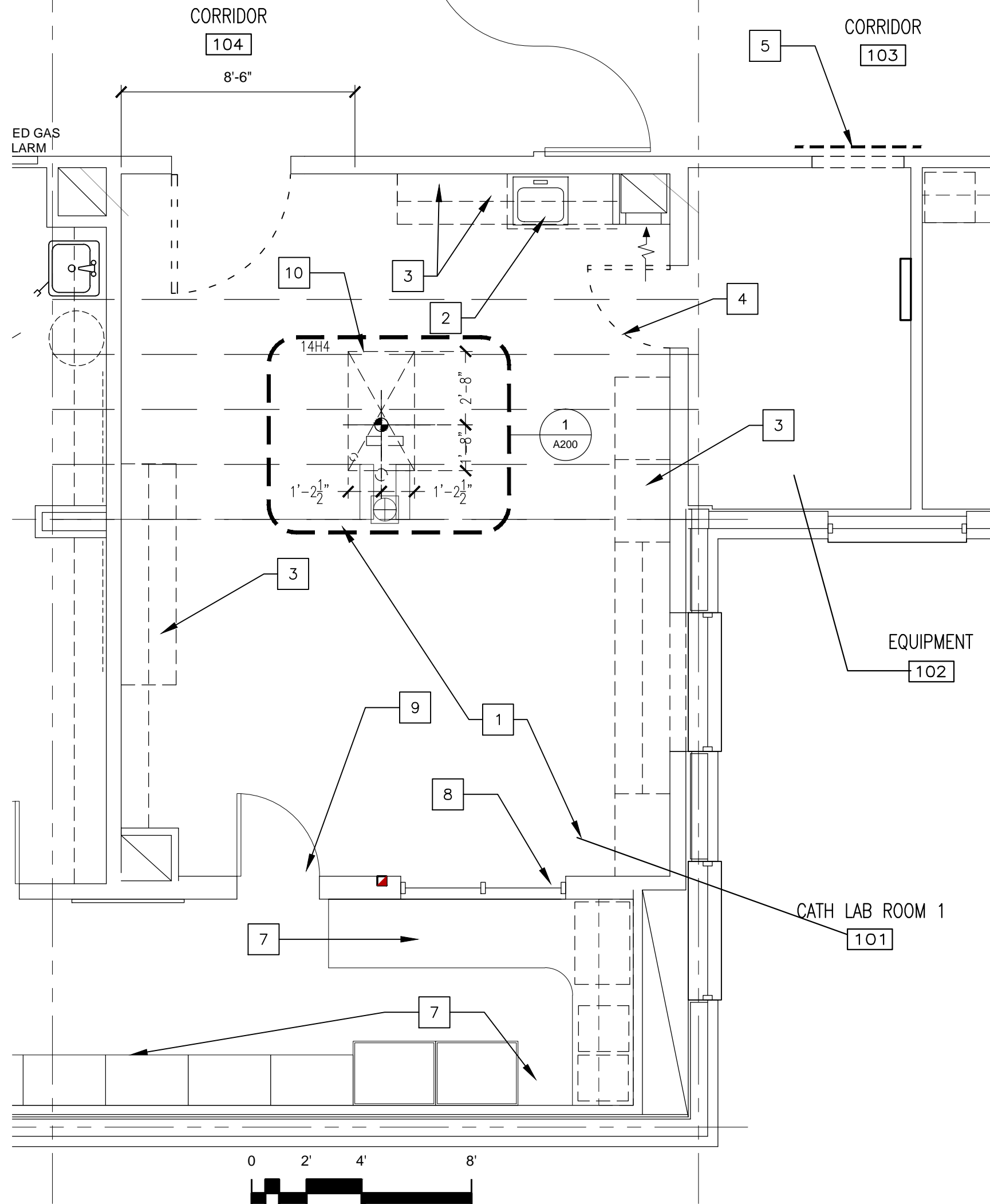
CHRISTUS Hospital St Elizabeth

2830 CALDER AVENUE
BEAUMONT, TX 77701

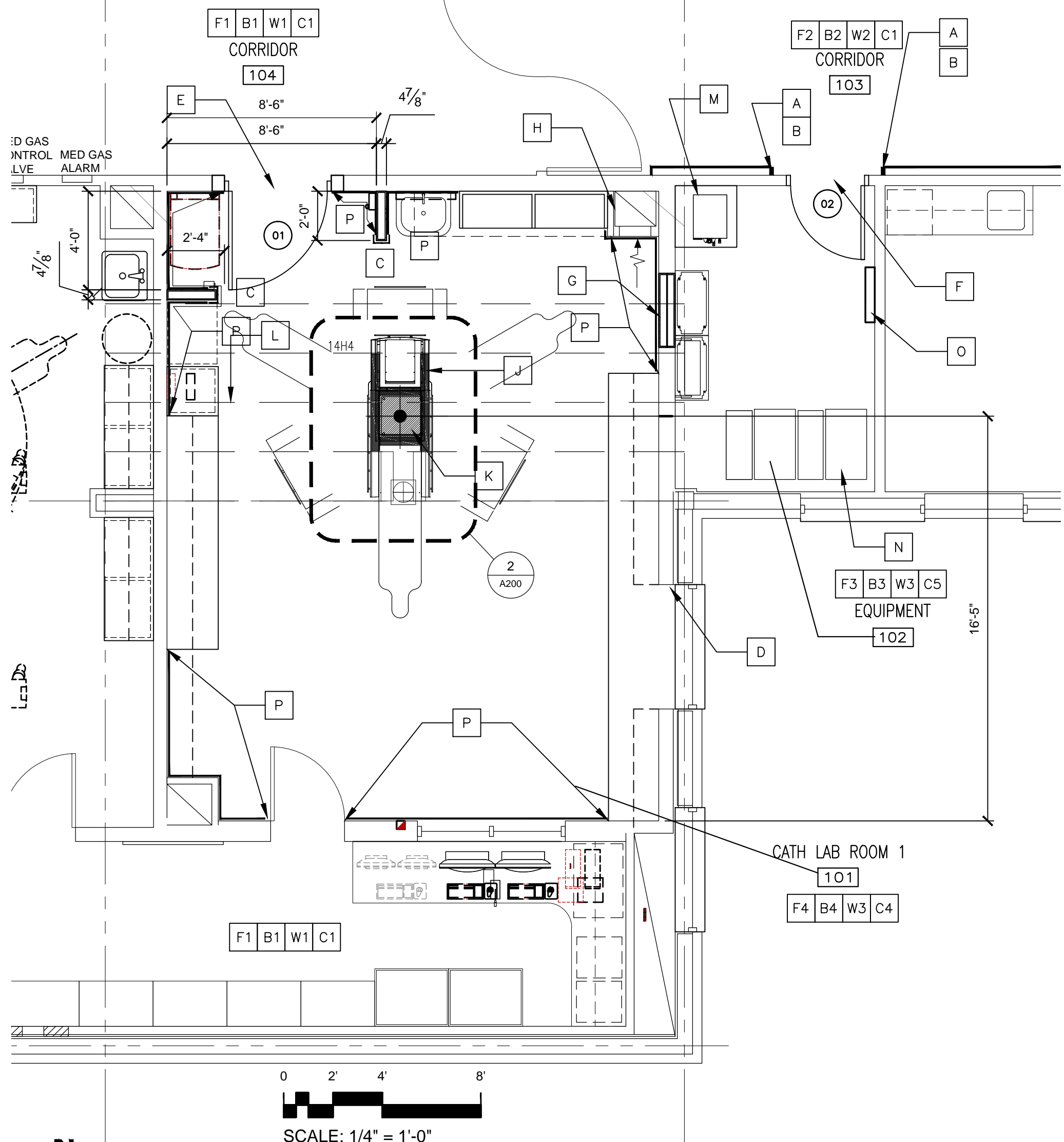
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REVISION:	
DATE:	
REVISION:	
DATE:	
REVISION:	
DATE:	

DRAWINGS SHEET TITLE
LIFE SAFETY

SHEET NUMBER
G200
20132
PROJECT NUMBER



- DEMO KEY NOTES**
1. REMOVE BASE AND FLOOR
 2. REMOVE SINK, CAP PLUMBING BEHIND FINISHED SURFACE
 3. REMOVE MILLWORK
 4. REMOVE DOOR AND FRAME
 5. REMOVE SECTION OF HANDRAIL AND BUMPER RAIL TO ALLOW FOR DOOR INSTALLATION.
 6. REMOVE DRYWALL AND STUD FRAMING TO EXPOSED WINDOW.
 7. EXISTING MILLWORK TO REMAIN
 8. EXISTING LEAD LINED VIEWING WINDOW TO REMAIN, PAINT FRAME.
 9. EXISTING LEAD LINED DOOR AND HM FRAME TO REMAIN, PAINT FRAME.
 10. SAW CUT AND REMOVE SECTION OF ELEVATED CONCRETE SLAB AS REQUIRED TO INSTALL BASE PLATE STRUCTURAL SUPPORTS.



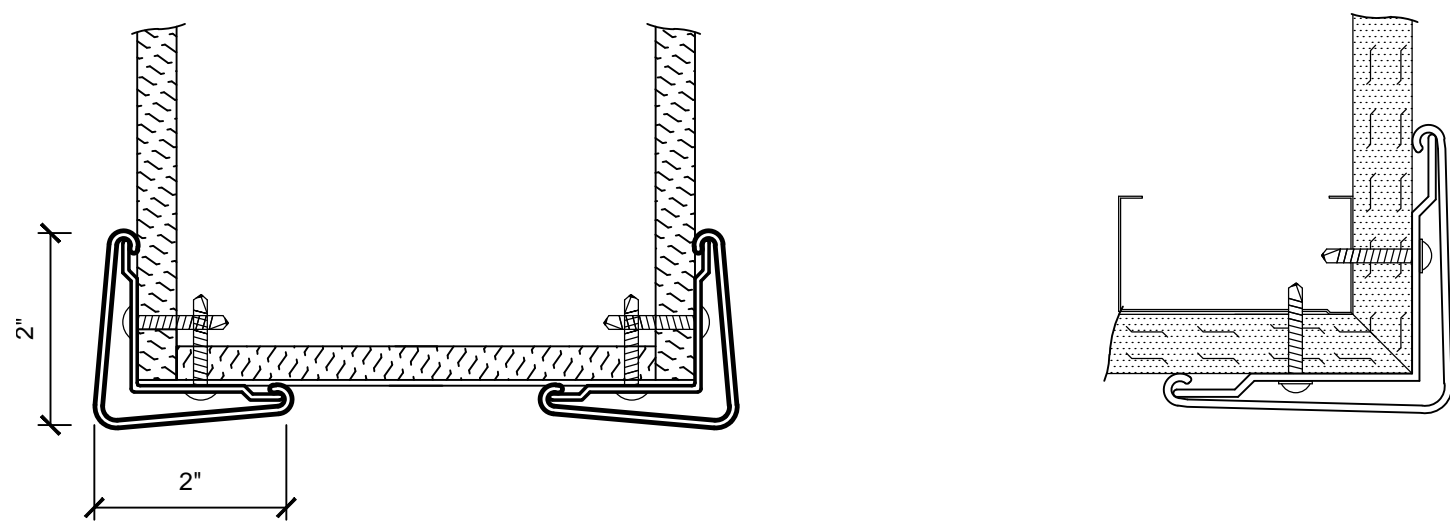
- FLOOR PLAN NOTES**
- FURNISH AND INSTALL NEW END CAP RETURN TO MATCH EXISTING ON HANDRAIL
 - FURNISH AND INSTALL NEW END CAP ON LOWER BUMPER RAIL TO MATCH EXISTING.
 - CORNER GUARD 4 / A101
 - FRAME WINDOW OPENING AND RETURN HEAD, JAMBS AND SILL WITH GYP BD TO WINDOW FRAME. CLEAN EXISTING GLASS AND INSTALL NEW 2" X 4 1/2" ALUMINUM FRAMED WINDOW WITH 3/8" MICRO-BLINDS BETWEEN 3/8" TEMPERED CLEAR GLASS ON INTERIOR OF EXISTING WINDOW FRAME. WWW.IEGLASS.COM
 - NEW LEAD LINED 4070 DOOR AND HM FRAME
 - NEW 3070 DOOR WITH HM FRAME
 - INFILL OPENING WITH 5/8" GYP BD ON 3/8" 25 GA MTL STUDS AT 16" CTRS. GYP IS LEAD LINED ON CATH LAB ROOM SIDE. SEE SHIELDING PLAN.
 - REMOVE RETURN AIR GRILLE AND INFILL OPENING WITH 5/8" GYP BD ON 3/8" MTL STUDS. INSTALL NEW RETURN GRILL ON SOUTH FACE AS SHOWN. SEE MECH NOT USED
 - L4x4x1/2 ANGLES WELDED TO TOP CHORD OF JOISTS WITH L4x4x1/2 ANGLES WELDED WELDED PERPENDICULAR BETWEEN TO FRAME OPENING AND PROVIDE BEARING FOR NEW STEEL PLATE.
 - 24" X 24" X 1/2" THK STEEL PLATE WELDED TO TOP OF NEW ANGLES. PLATE TO HAVE 2" BEARING ON ANGLES, ADD METAL FLOOR DECK TO HAVE 2" BEARING ON ANGLES. WELD NUTS TO UNDERSIDE OF STEEL PLATE FOR TABLE BOLT ATTACHMENT.
 - EXISTING 14H4 JOISTS AT 2 FT CENTERS
 - ANGLE IRON FRAME TABLE FOR TUBE COOLING UNIT. SEE 5/A200
 - ELECTRICAL CONTRACTOR TO RELOCATE ROOM 2 UPS AND TRANSFORMER CABINET TO THIS LOCATION. CONFIRM EXACT PLACEMENT WITH SIEMENS.
 - EXISTING ELECT PANEL TO REMAIN
 - INPRO VINYL WALLCOVERING WALL PROTECTION FROM TOP OF 6" BASE TO 36" AFF. ON ALL EXPOSED WALLS WITHIN CATH LAB ROOM 1

Door Schedule

- Door 01
4070 Lead Lined Solid Core Wood plastic laminate finish in hollow metal frame.
Continuous heavy duty hinge
Hospital Latch
Heavy Duty Closer
Stainless Steel edge guard door protector to 48", both hinge and strike edges
Magnetic Hold Open Device interlocked with fire alarm
- Door 02
3070 Solid Core Wood Door plastic laminate finish in hollow metal frame.
1.5 Pr Butt Hinges
Storeroom Lock
Closer
Wall Stop

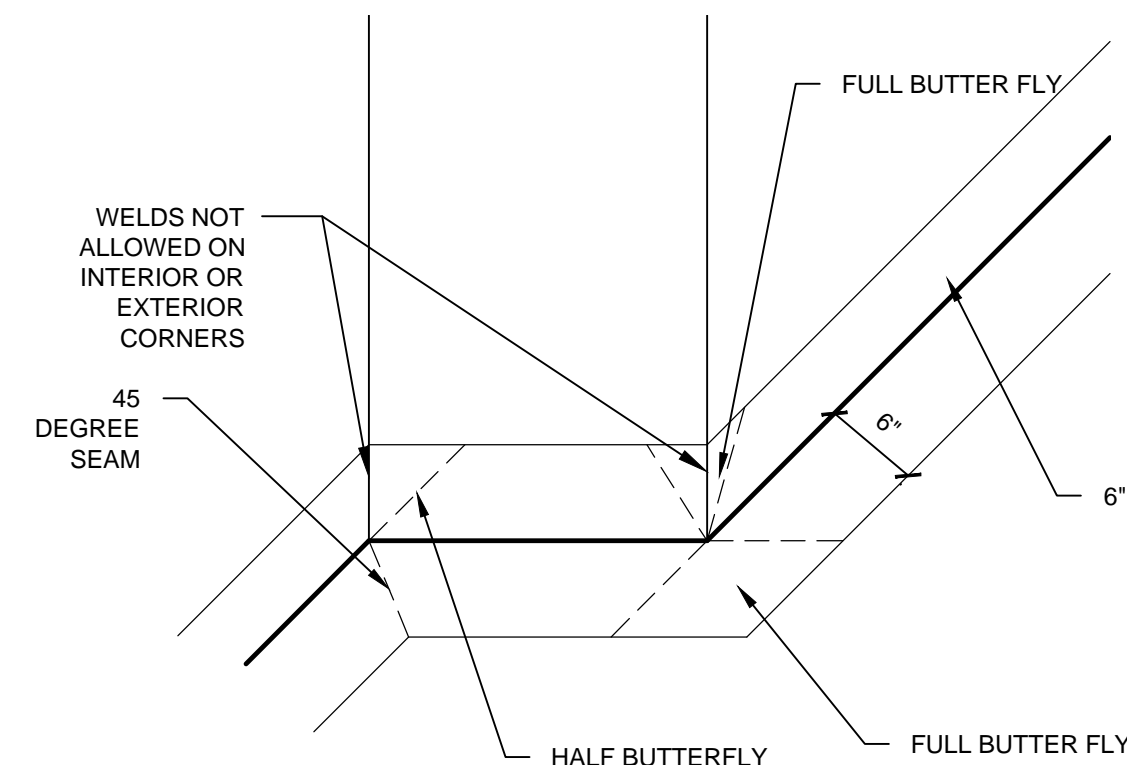
1 FLOOR PLAN - DEMOLITION
SCALE: 1/4" = 1'-0"

2 FLOOR PLAN - NEW
SCALE: 1/4" = 1'-0"



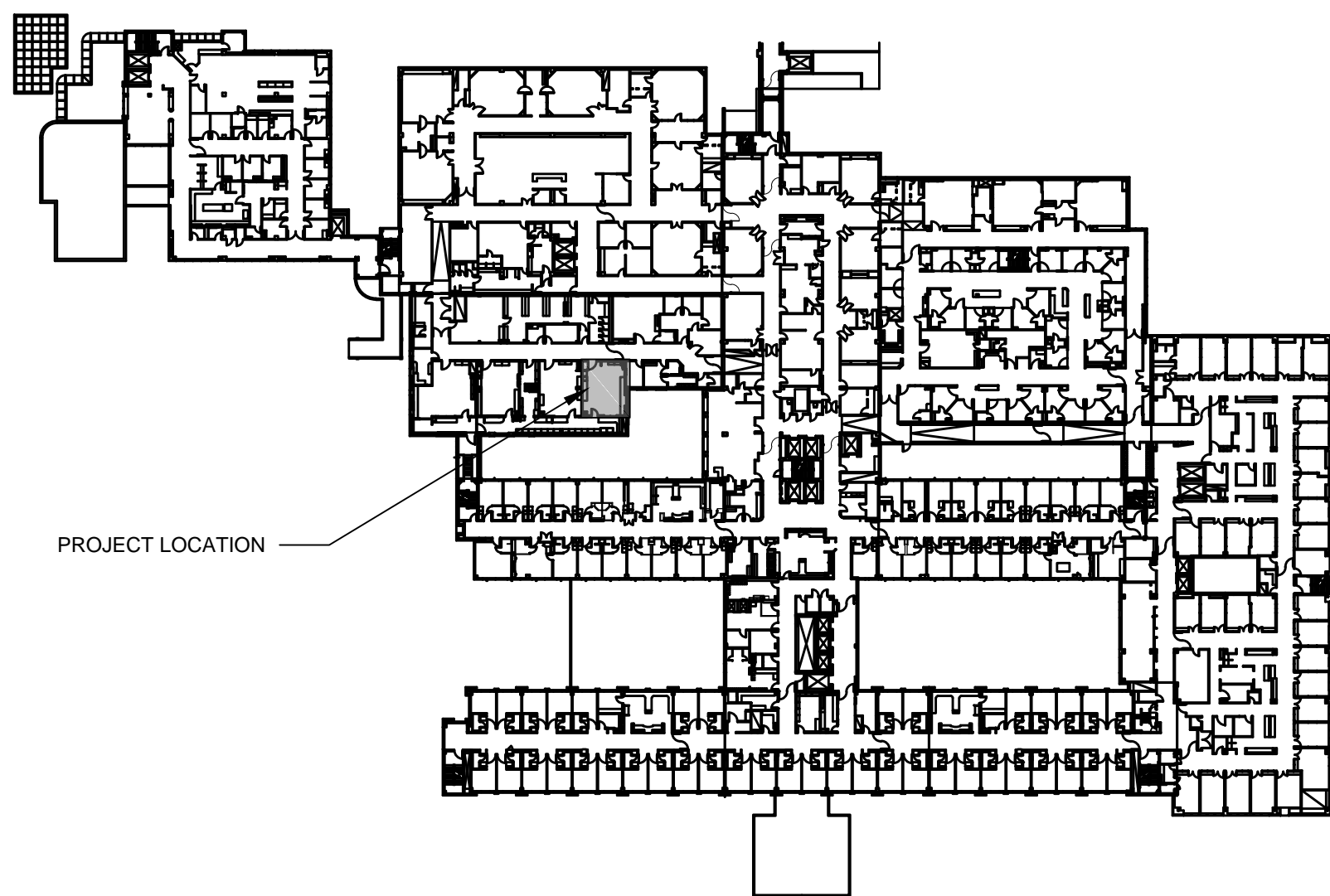
4 INPRO 160D
SCALE: 6" = 1'-0"

5 INPRO 150
SCALE: 6" = 1'-0"

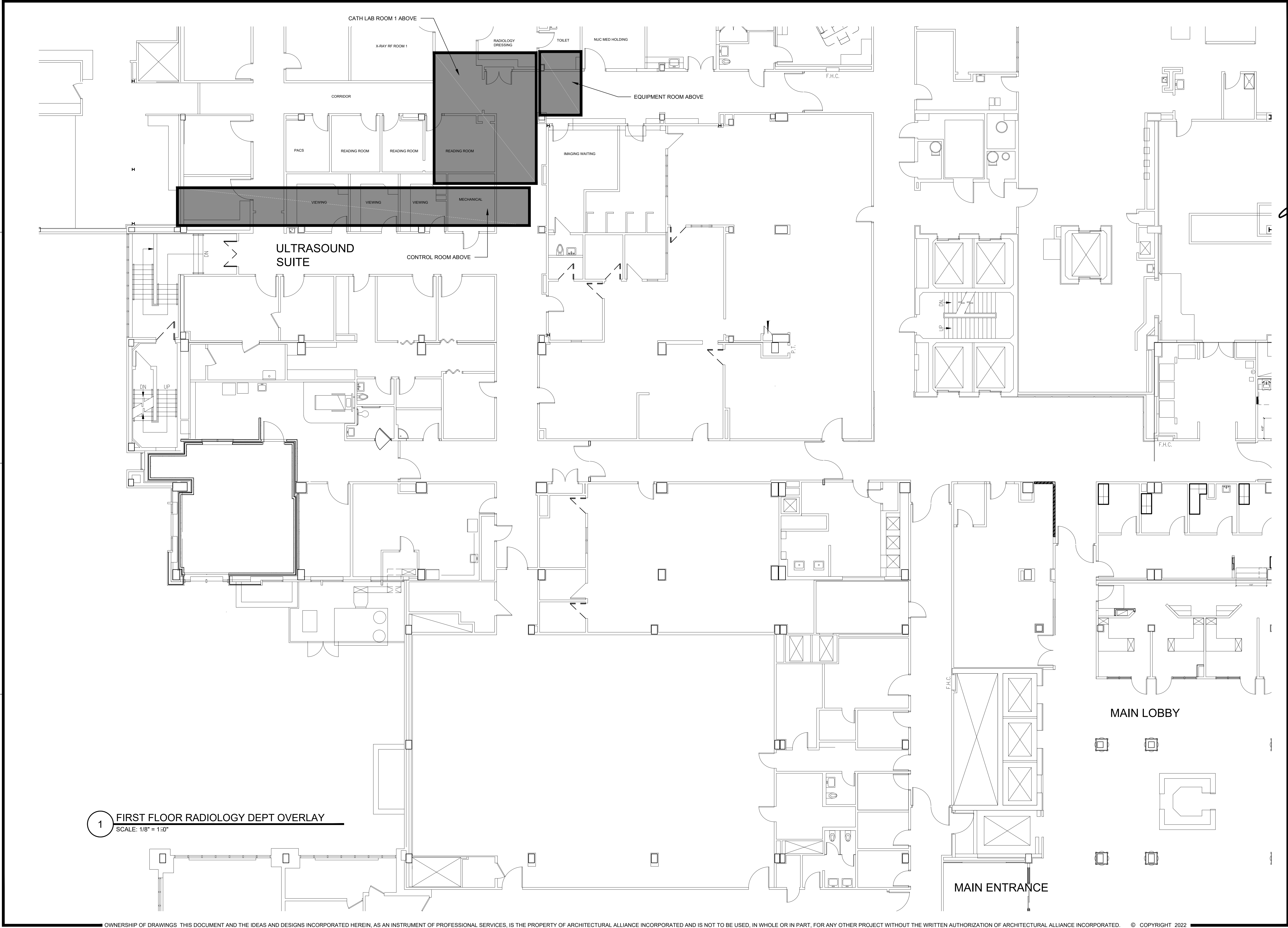


6 SHEET VINYL CORNER DETAIL
SCALE: N.T.S.

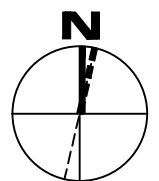
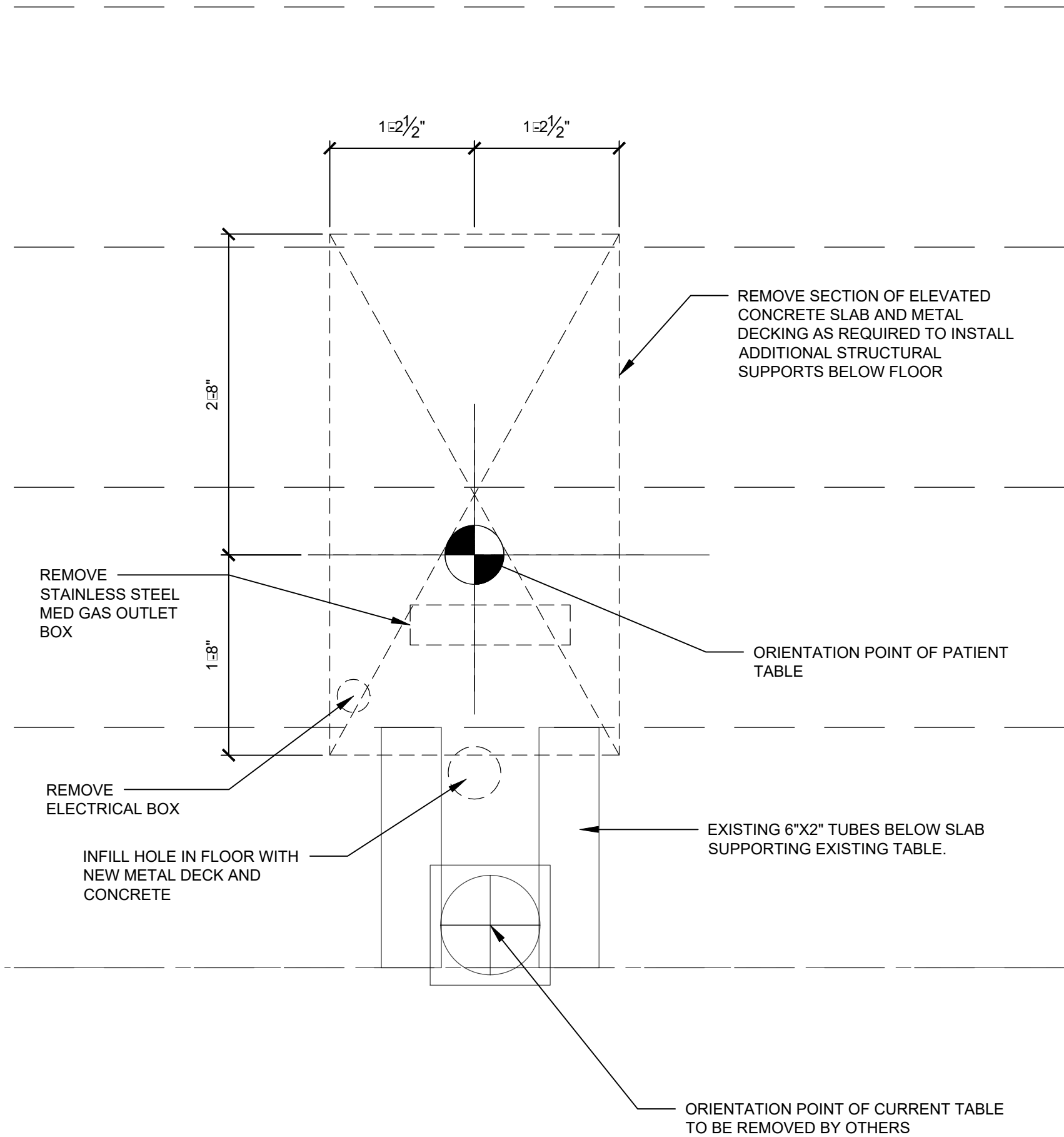
ROOM FINISH	
FLOOR	F1 EXISTING TO REMAIN F2 PATCH TO MATCH EXISTING F3 AMITCO SPACIA LVT SSS54599 BOTTICINO CREAM 18X18 F4 ARMSTRONG SHEET VINYL MEDITECH GOLDEN GLOW 88451. HEAT WELD SEAMS
BASE	B1 EXISTING TO REMAIN B2 PATCH TO MATCH EXISTING B3 4" RUBBER JOHNSONITE 45 SANDLEWOOD B4 6" FLASH COVED WITH BUTTERFLY CORNERS-6/A101 ARMSTRONG SHEET VINYL MEDITECH GOLDEN GLOW 88451. HEAT WELD SEAMS
WALLS and CEILING FURR DOWNS	W1 EXISTING TO REMAIN W2 PATCH EXISTING AND REPAINT FROM CORNER TO CORNER OF WALLS OR TO EDGE OF DOOR FRAME W3 SHERWIN WILLIAMS PAINT SHIELD SW6126 NAVAJO WHITE-WALL COLOR W4 SHERWIN WILLIAMS PAINT SHIELD KOI POND SW7727 - ACCENT
CEILING	C1 EXISTING TO REMAIN C2 REPAINT EXISTING DRYWALL C3 REPLACE DAMAGED OR MISSING GRID AND ACOUSTICAL TILES C4 3" GYP BD ON SUSP GRID, TAPE, FLOAT, PAINT SHERWIN WILLIAMS PAINT SHIELD COLOR WHITE C5 2X2 ARMSTRONG FINE FISSURED #1810 W/ 1/8" T-GRID
PLAM	P1 FORMICA - 7288-58 GINGER ROOT MAPLE - CABINET FACE
SOLID SURFACE	SS1 FORMICA 742 BLANCO TERRAZZO
WALL PROTECTION-INPRO IFC	CG-1 CORNER GUARD INPRO CORP 150 OATMEAL 0239
DOOR FRAMES	PAINT DOOR FRAMES SHERWIN WILLIAMS PAINT SHIELD SW6125 CRAFT PAPER



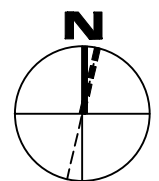
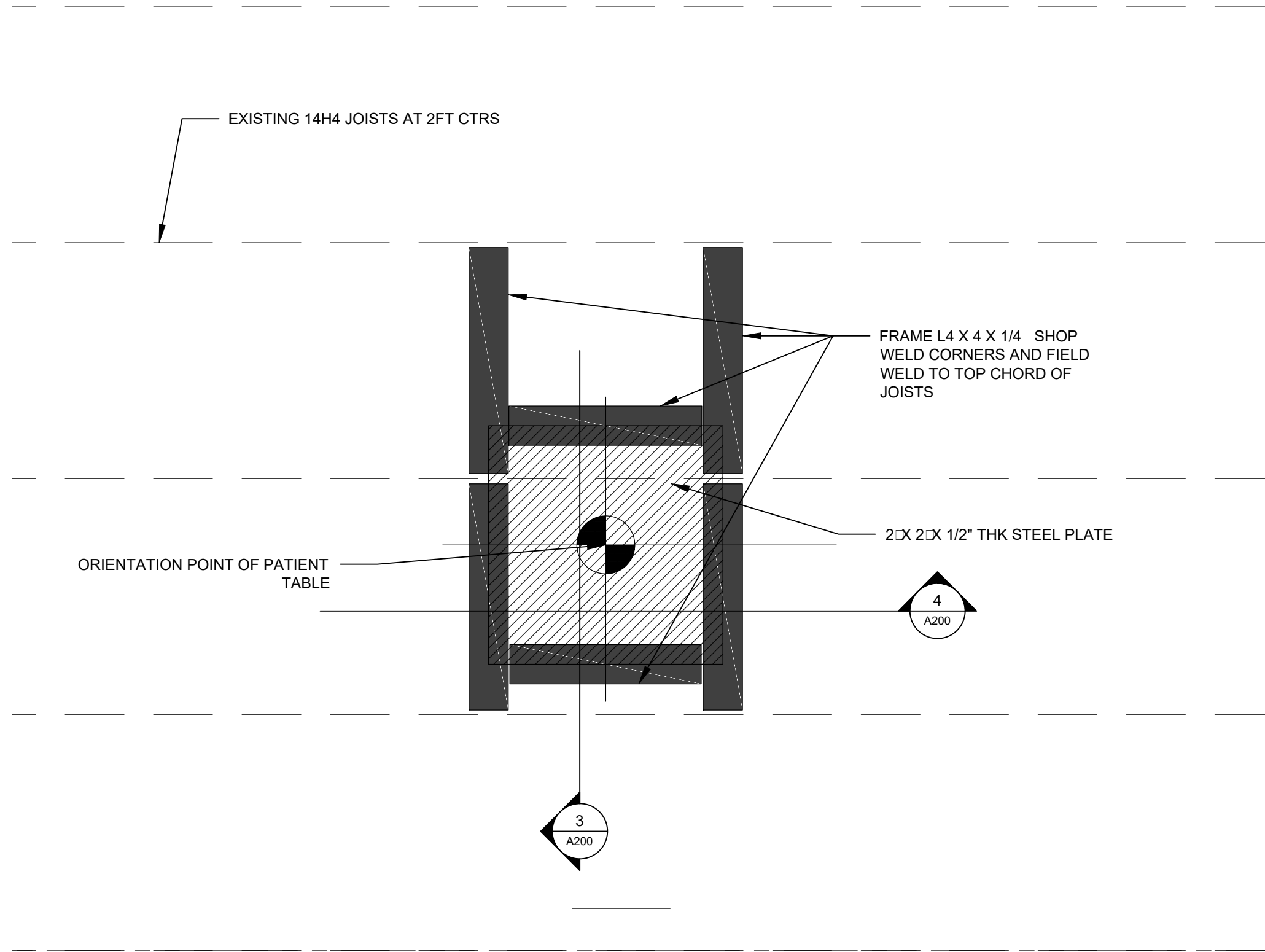
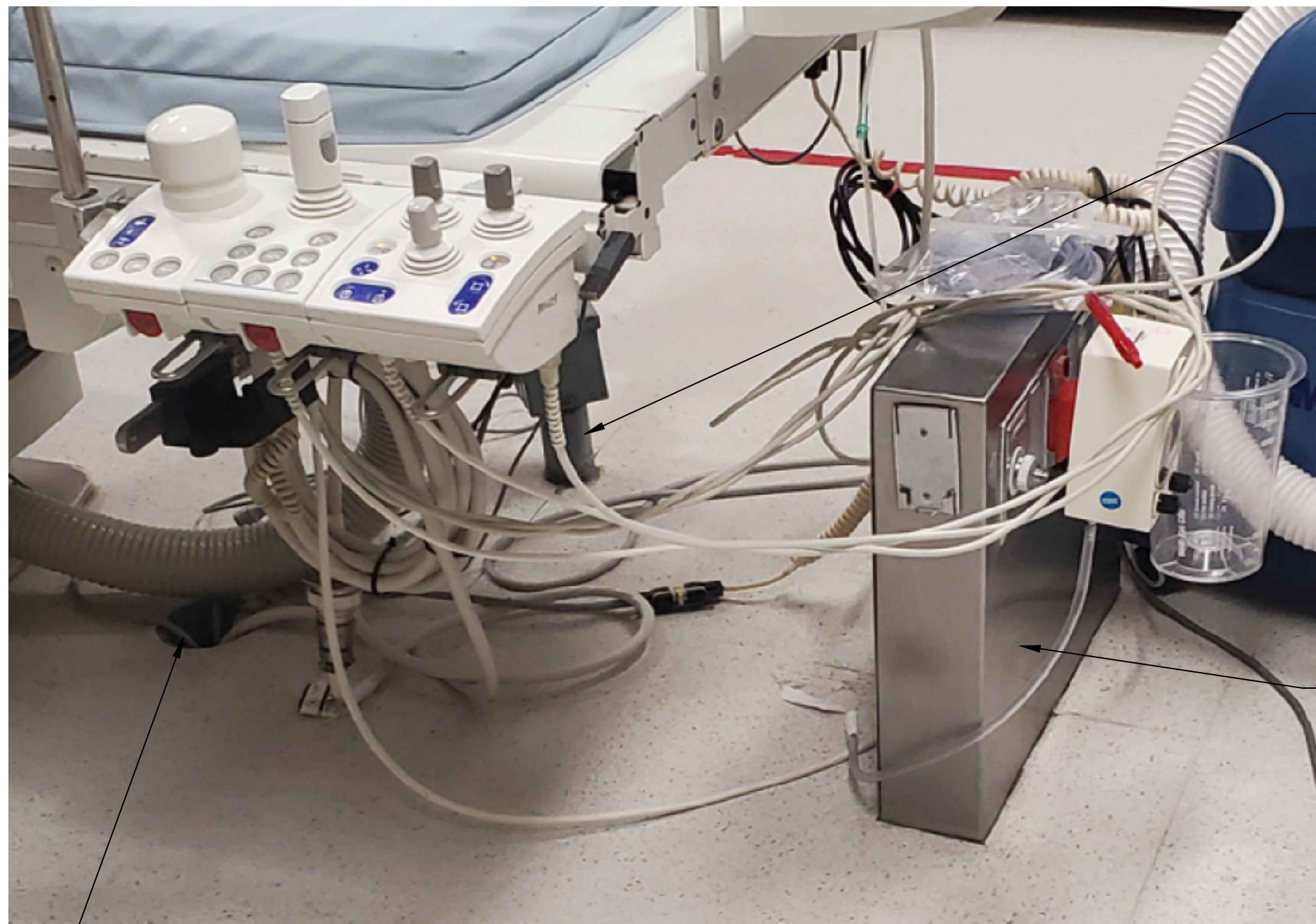
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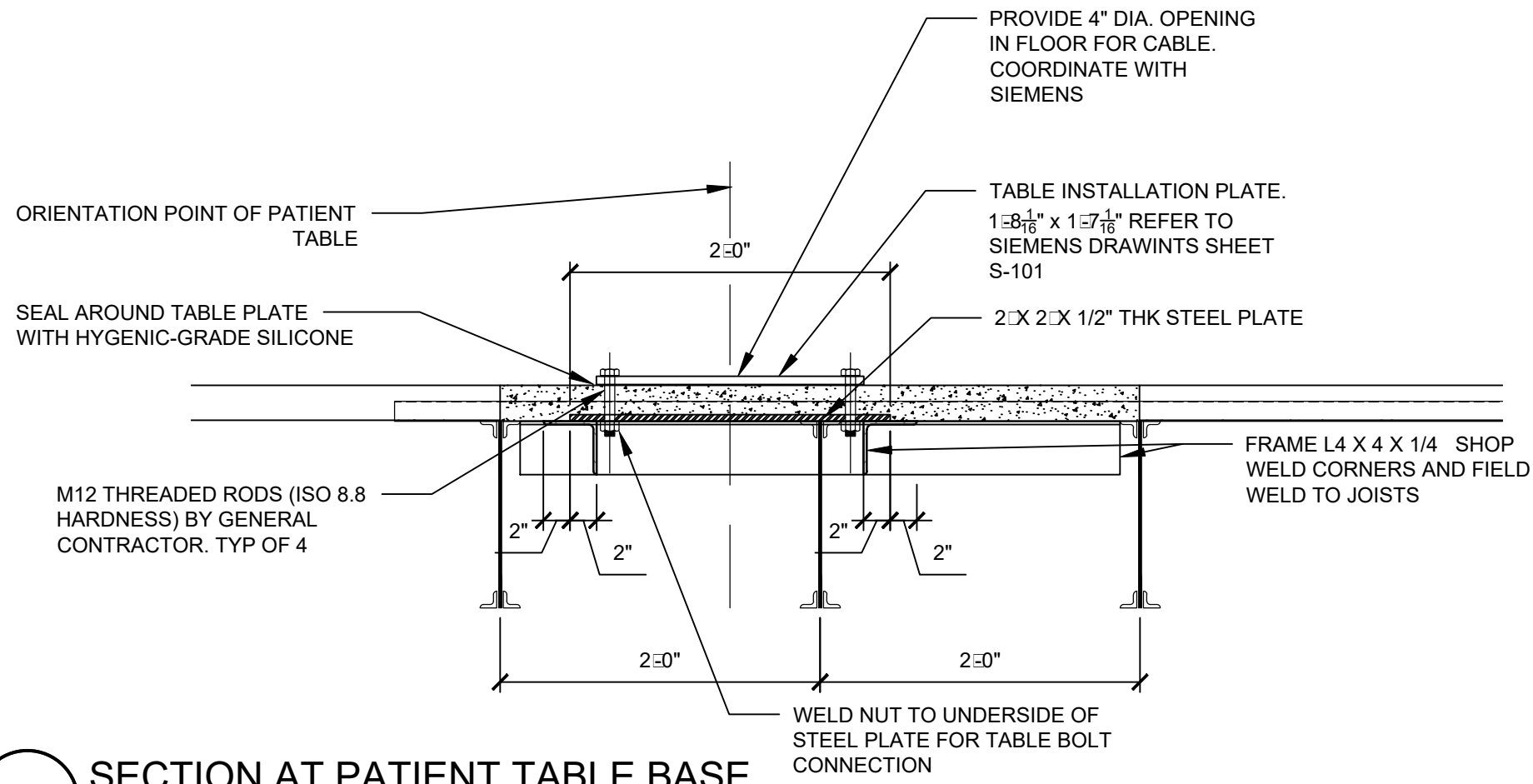
1 FIRST FLOOR RADIOLOGY DEPT OVERLAY
SCALE: 1/8" = 1'-0"



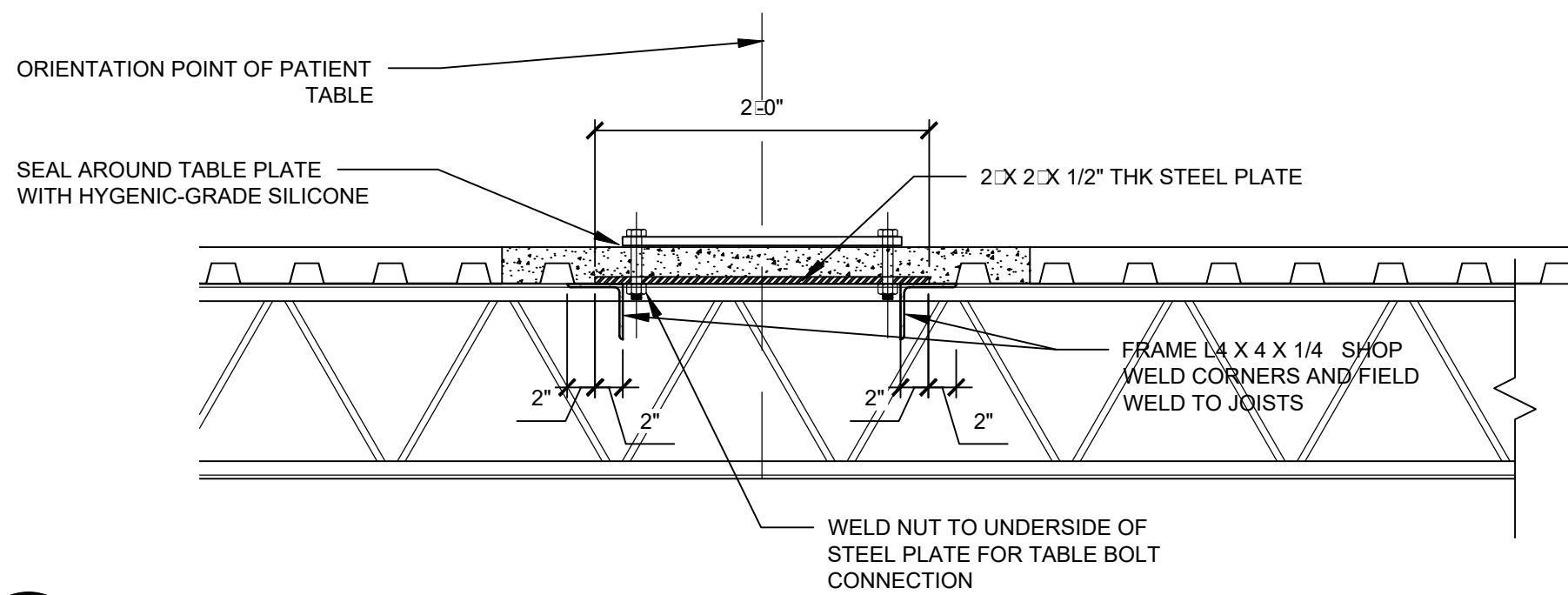
1 DETAILS - DEMOLITION
SCALE: 1" = 1'-0"



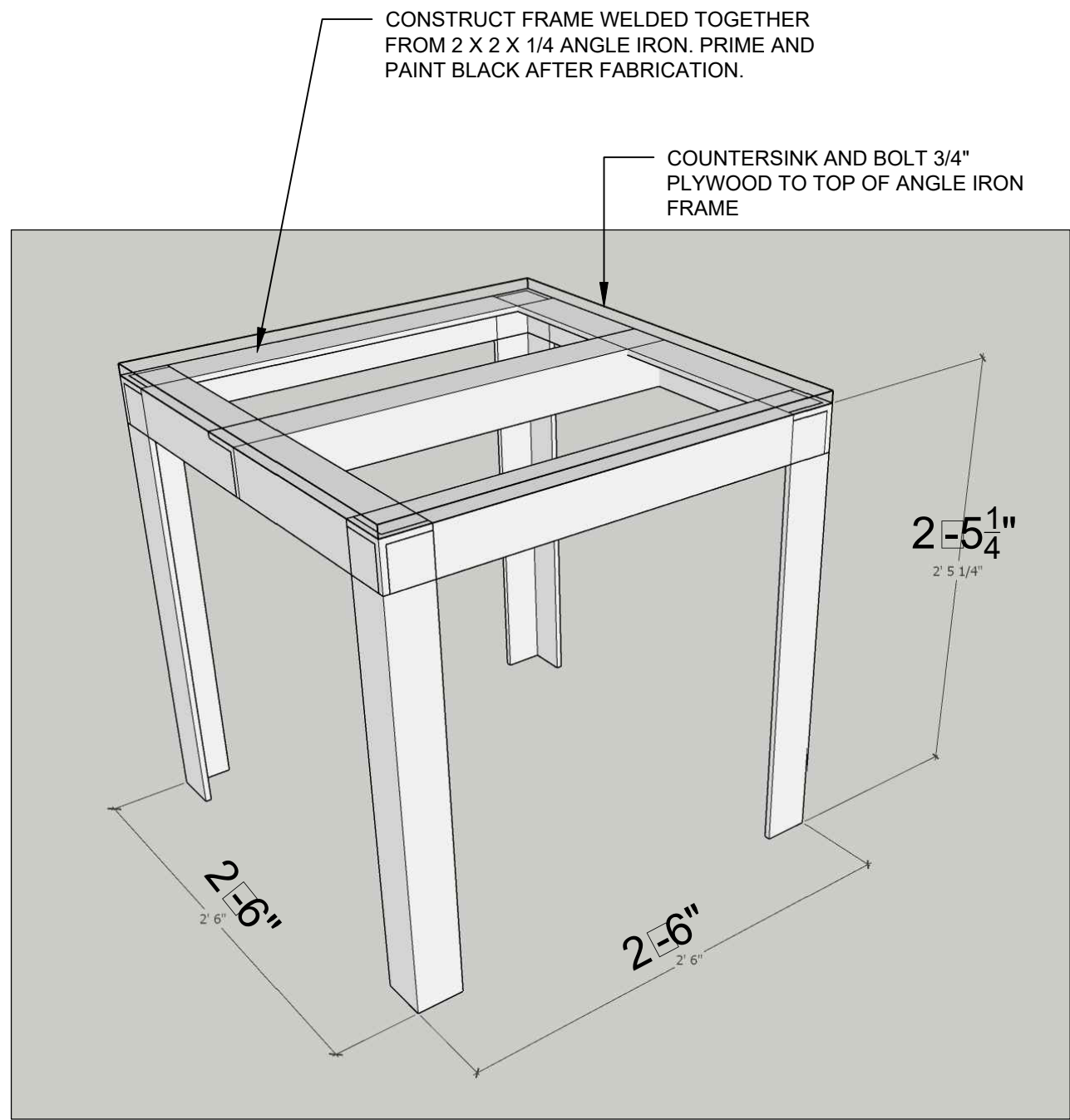
2 DETAILS - NEW
SCALE: 1" = 1'-0"



3 SECTION AT PATIENT TABLE BASE
SCALE: 1" = 1'-0"



4 SECTION AT PATIENT TABLE BASE
SCALE: 1" = 1'-0"



5 TUBE COOLING UNIT RACK (1 REQ'D)
SCALE: NONE

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

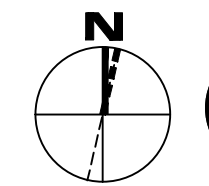
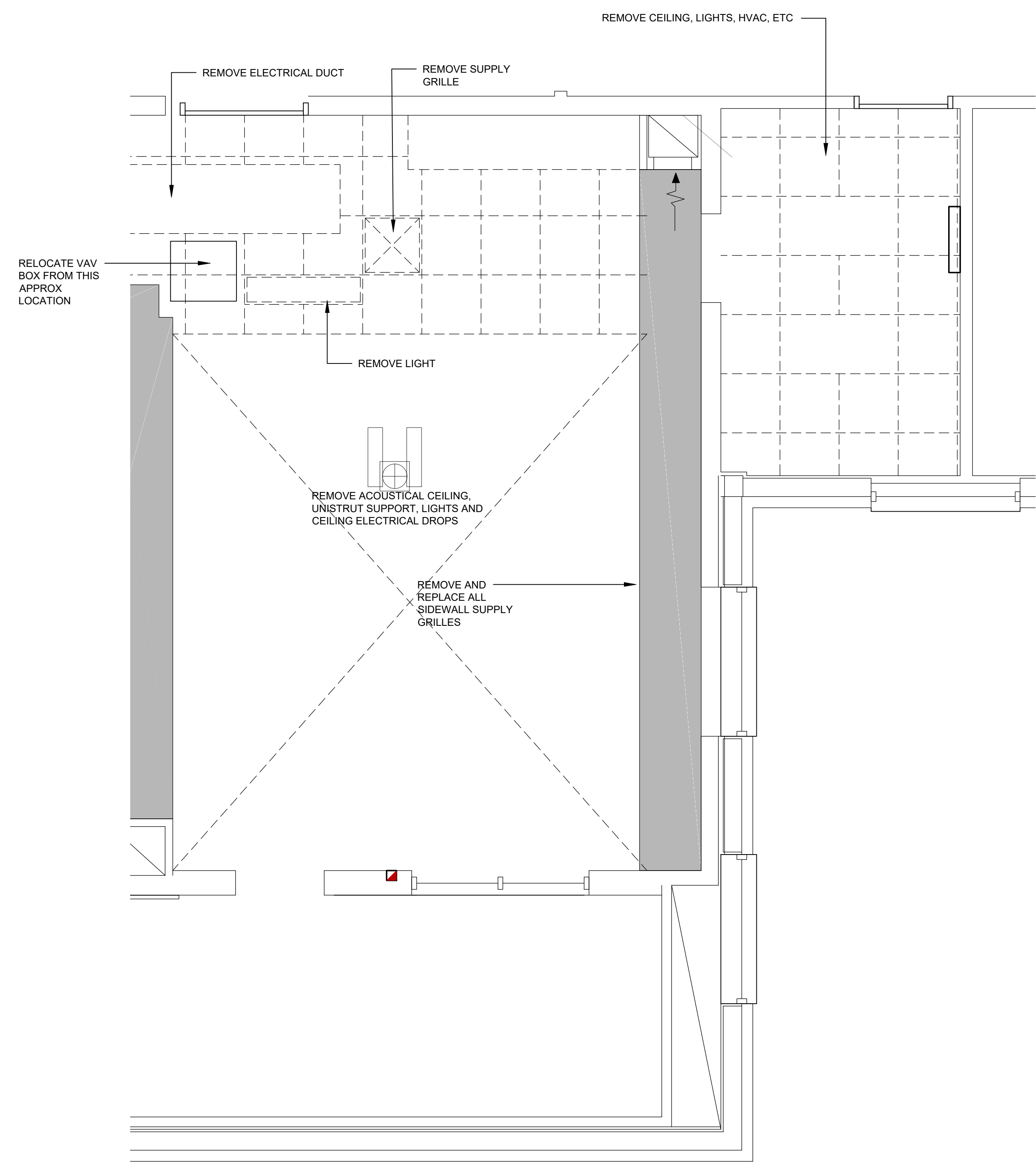
CHRISTUS Hospital St Elizabeth

2830 CALDER AVENUE
BEAUMONT, TX 77701

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DESIGN DEVELOPMENT	<input type="checkbox"/>
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BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 5-17-22	
REVISION:	
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DATE:	

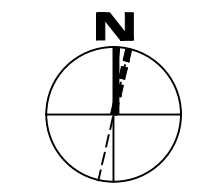
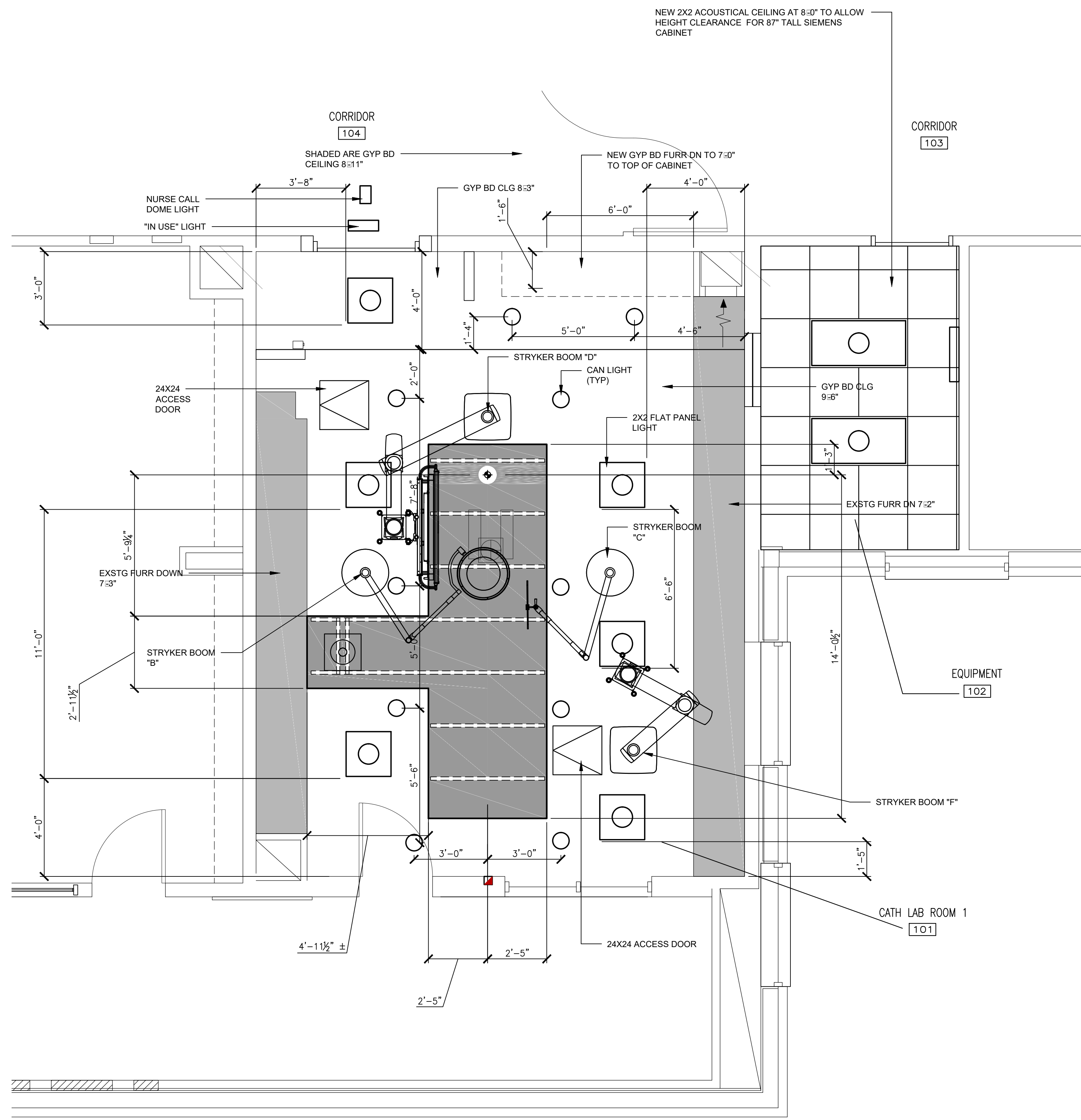
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REFLECTED
CEILING PLAN

SHEET NUMBER
A300
20132
PROJECT NUMBER



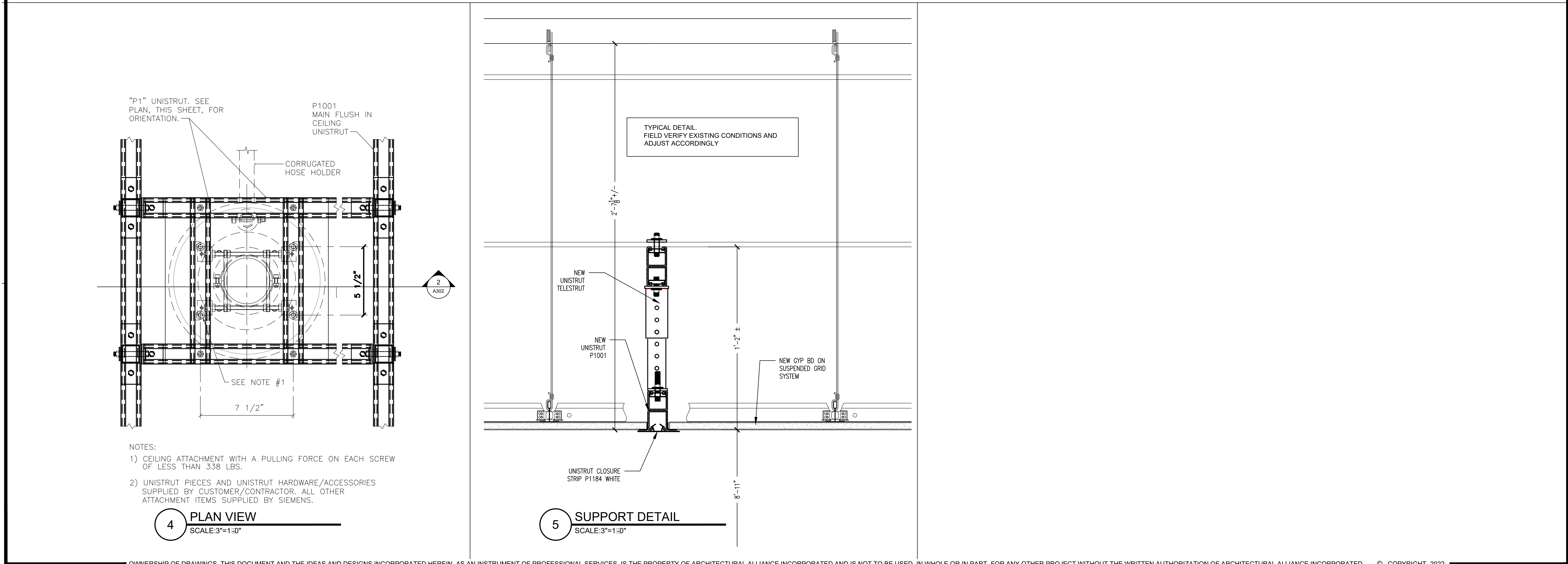
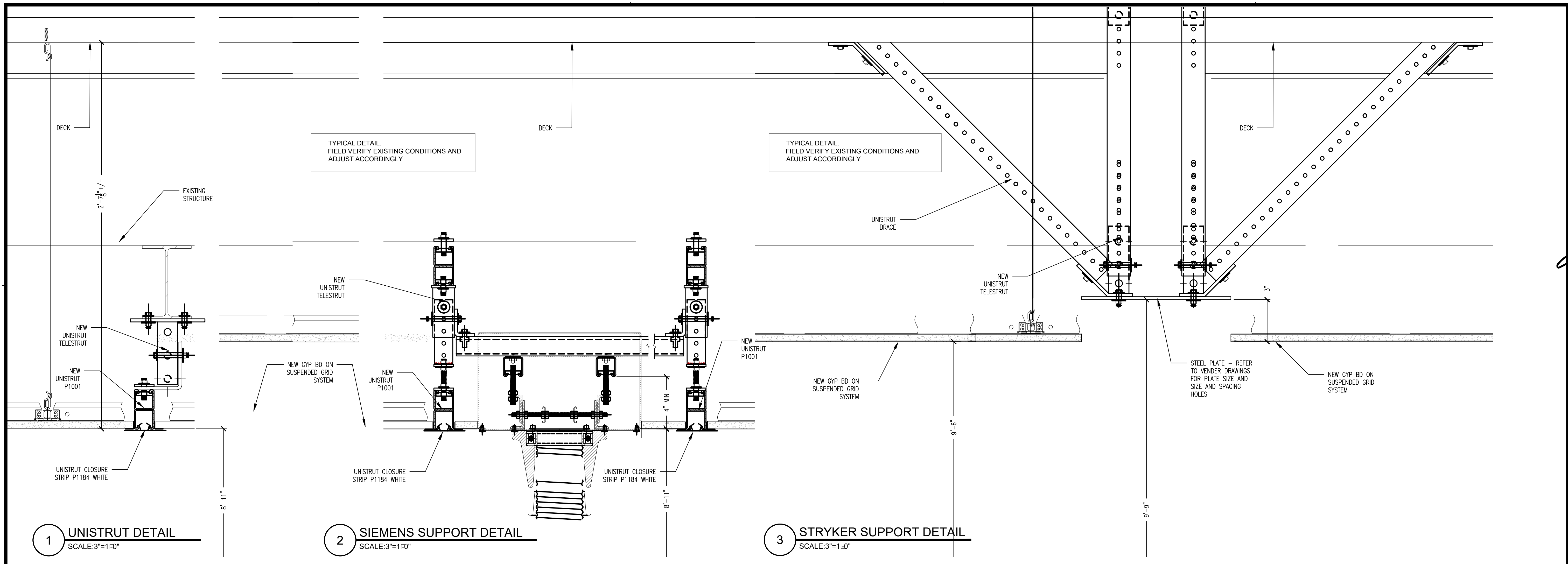
1 REFLECTED CEILING PLAN - DEMOLITION
SCALE: 3/8" = 1'-0"

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2 REFLECTED CEILING PLAN - NEW PLAN
SCALE: 3/8" = 1'-0"

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330 Pine Street, Suite 720
Beaumont, Texas 77701
TEL: (409) 865-7196
FAX: (409) 865-7195
J. ROBERT CURRY, AIA
RONALD M. JONES, AIA
www.architectall.com

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

2830 CALDER AVENUE
BEAUMONT, TX 77701

ISSUED FOR SCHEMATIC ☐

DATE: _____

DESIGN DEVELOPMENT ☐

DATE: 10-25-18

BUDGET PRICING ☒

DATE: 11-1-18

BIDS & CONSTRUCTION ☒

DATE: 5-31-19

REVISION ☐

DATE: ----

REVISION ☐

DATE: ----

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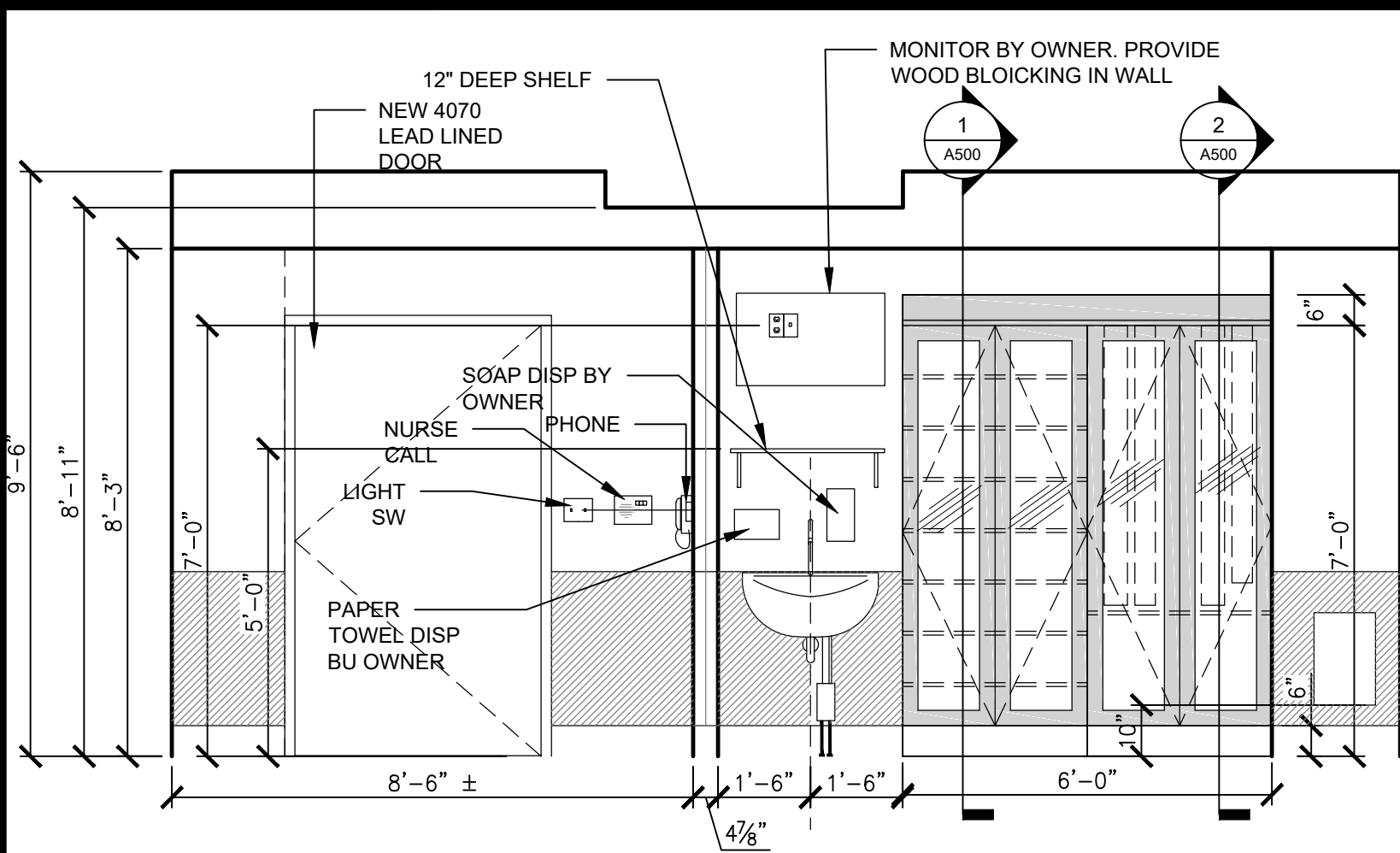
CEILING DETAILS

SHEET NUMBER

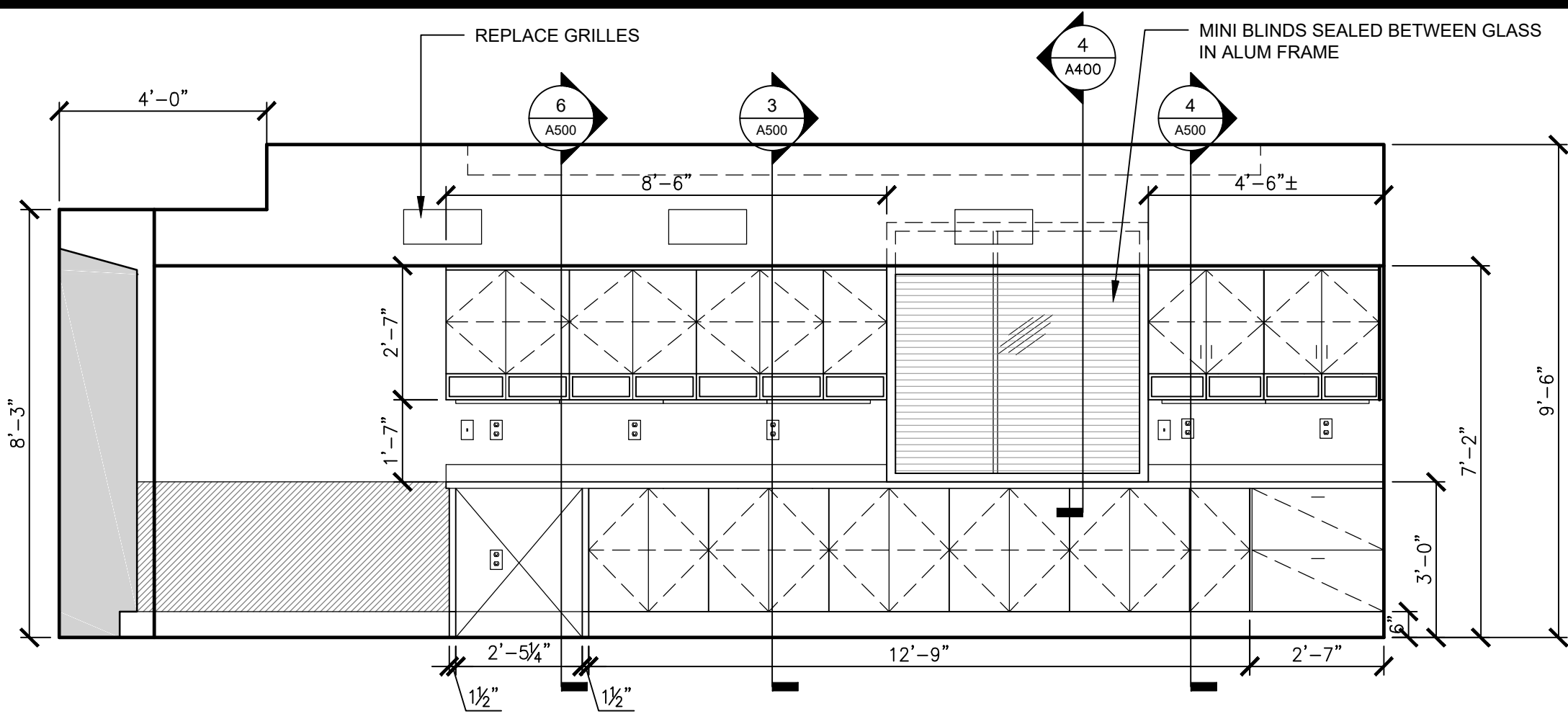
A301

20132

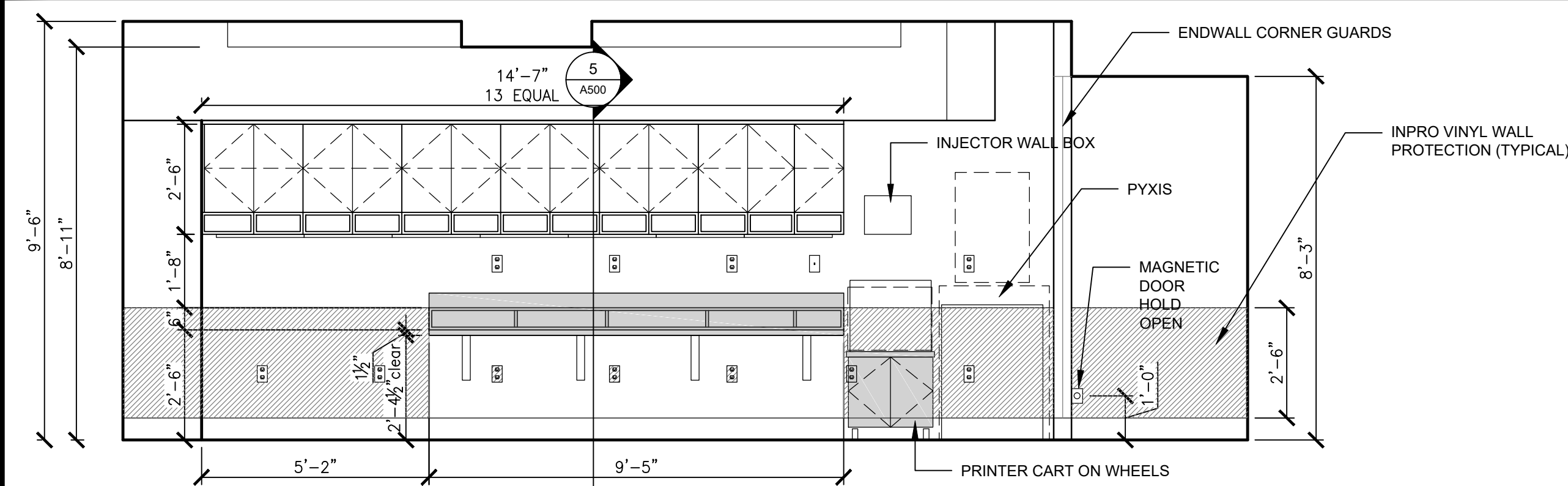
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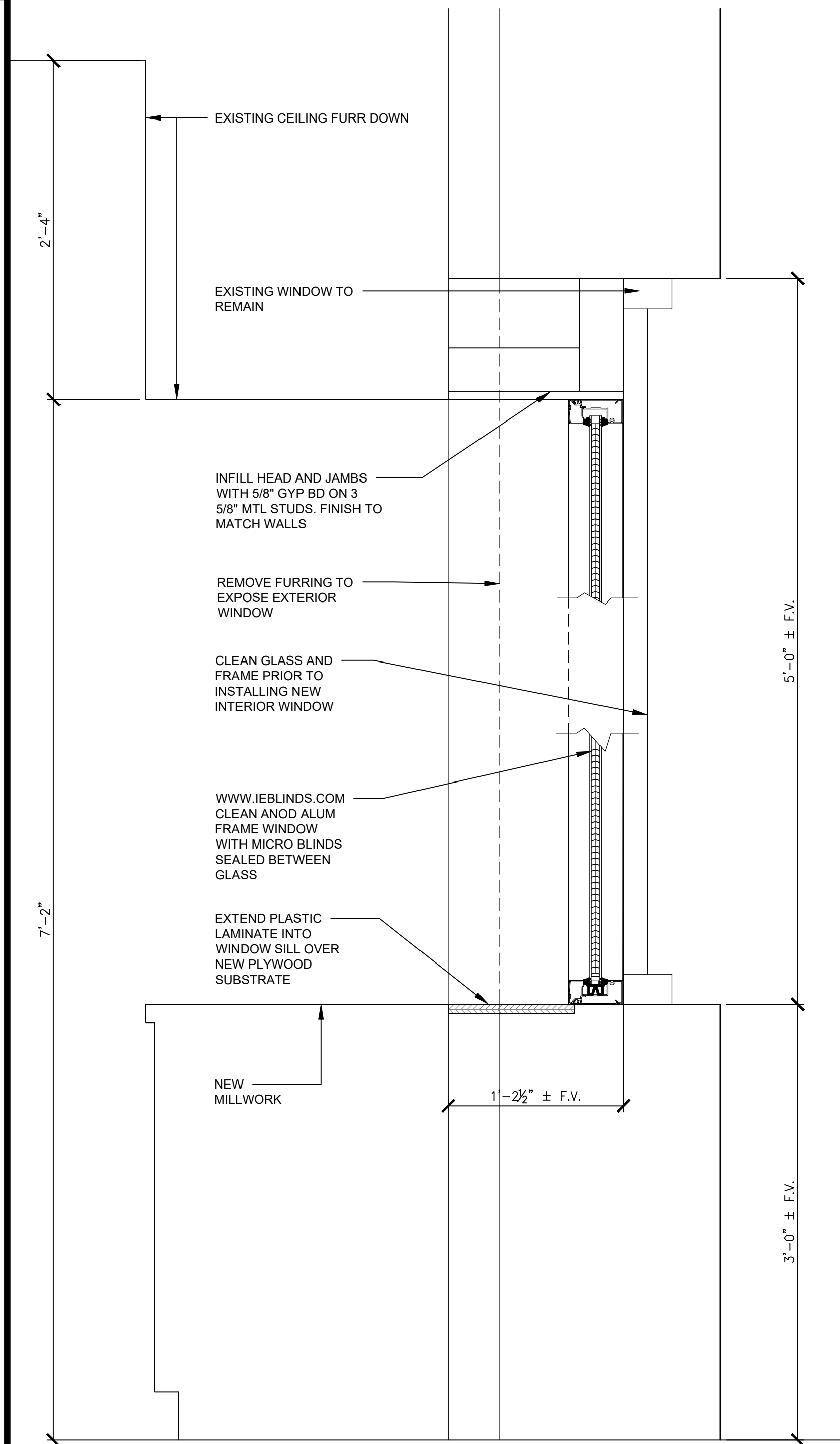
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SCALE: 3/8" = 1'-0"



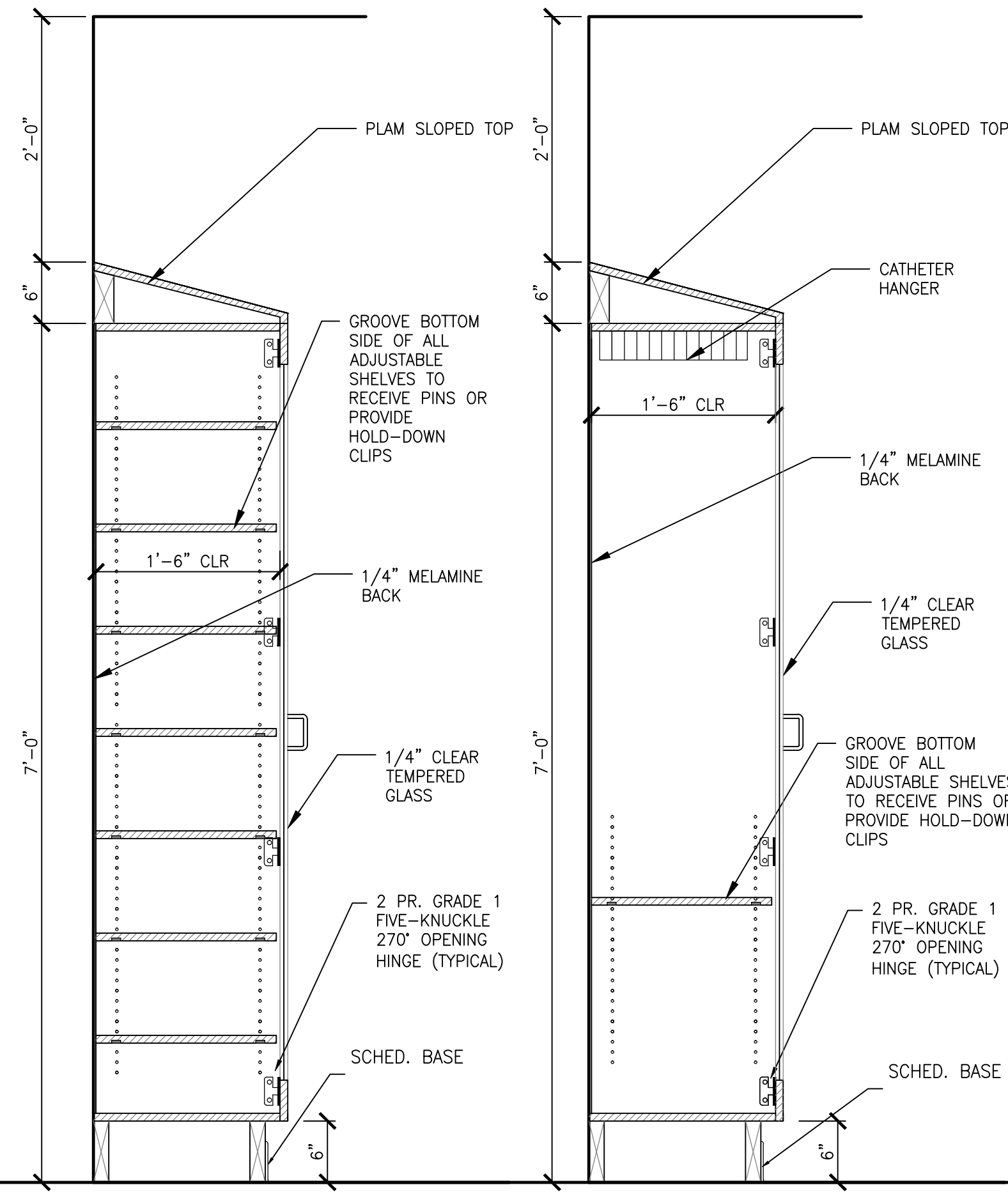
2 INTERIOR ELEVATIONS
SCALE: 3/8" = 1'-0"



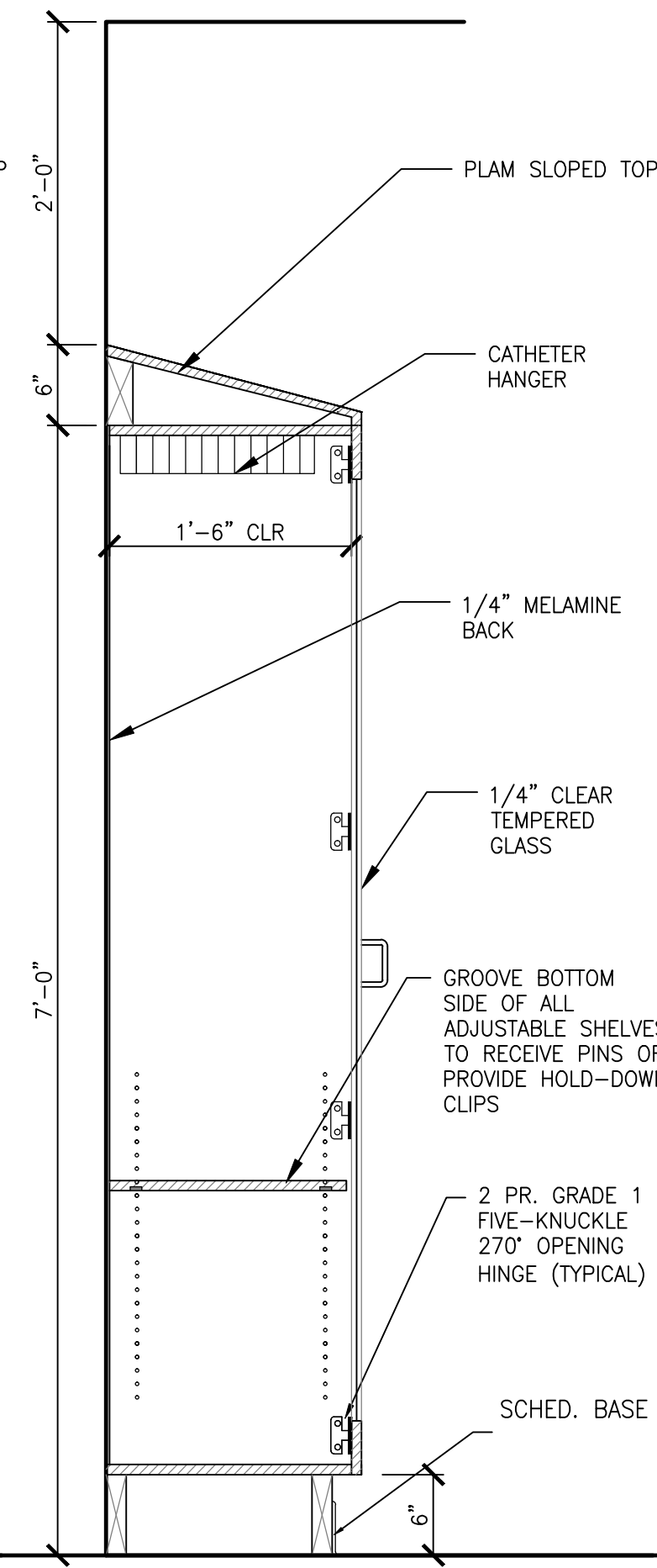
3 INTERIOR ELEVATIONS
SCALE: 3/8" = 1'-0"



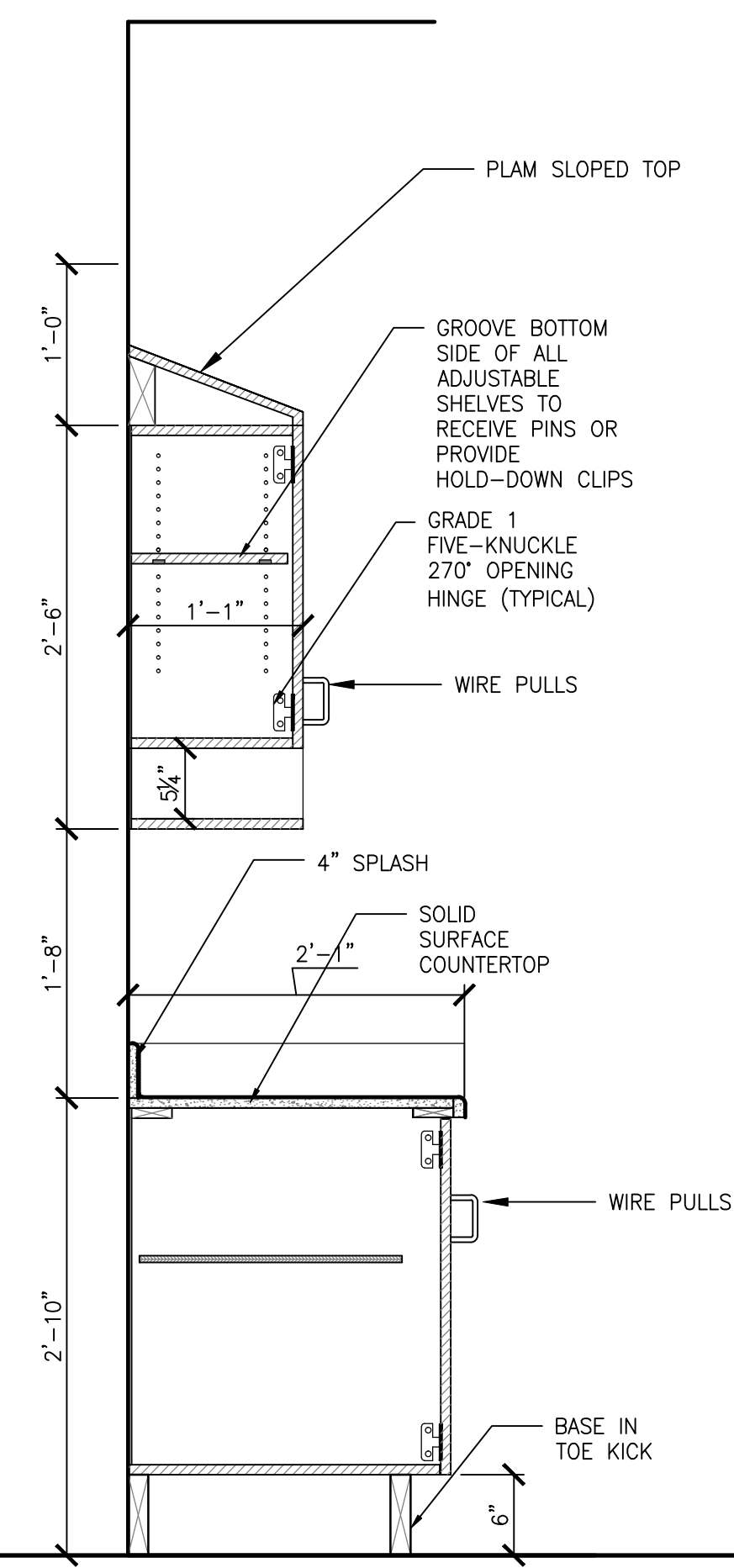
4 EXTERIOR WINDOW SECTION
SCALE: 3/8" = 1'-0"



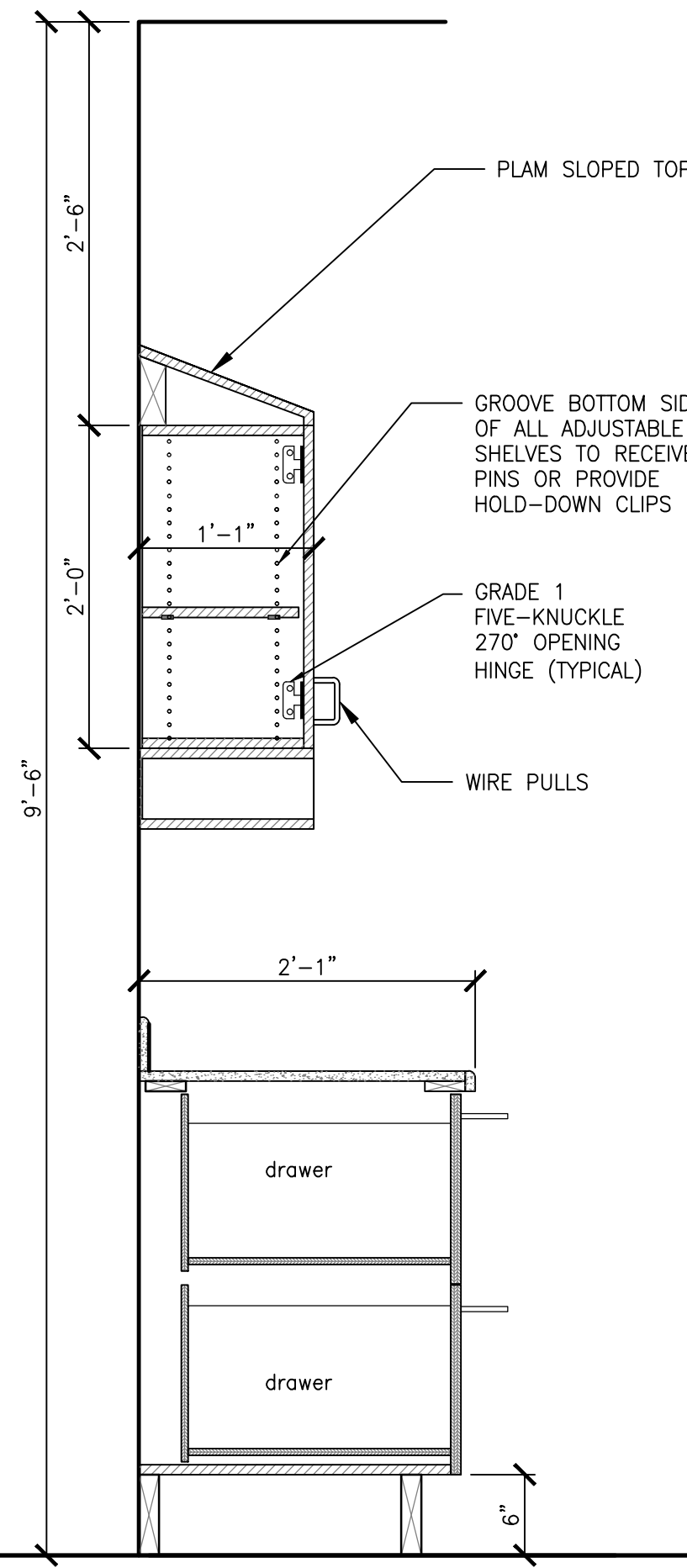
1 MILLWORK DETAILS
SCALE: 1" = 1'-0"



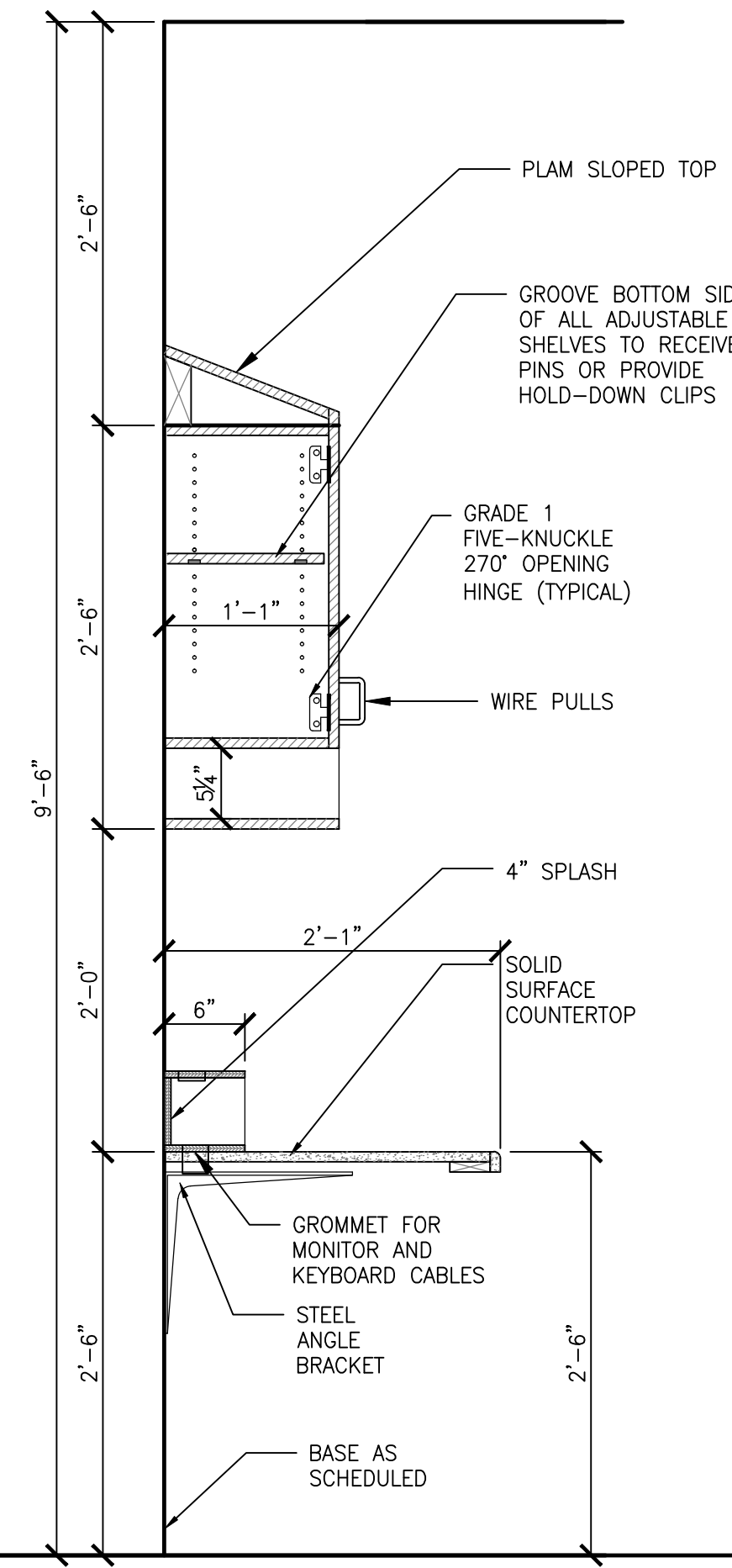
2 MILLWORK DETAILS
SCALE: 1" = 1'-0"



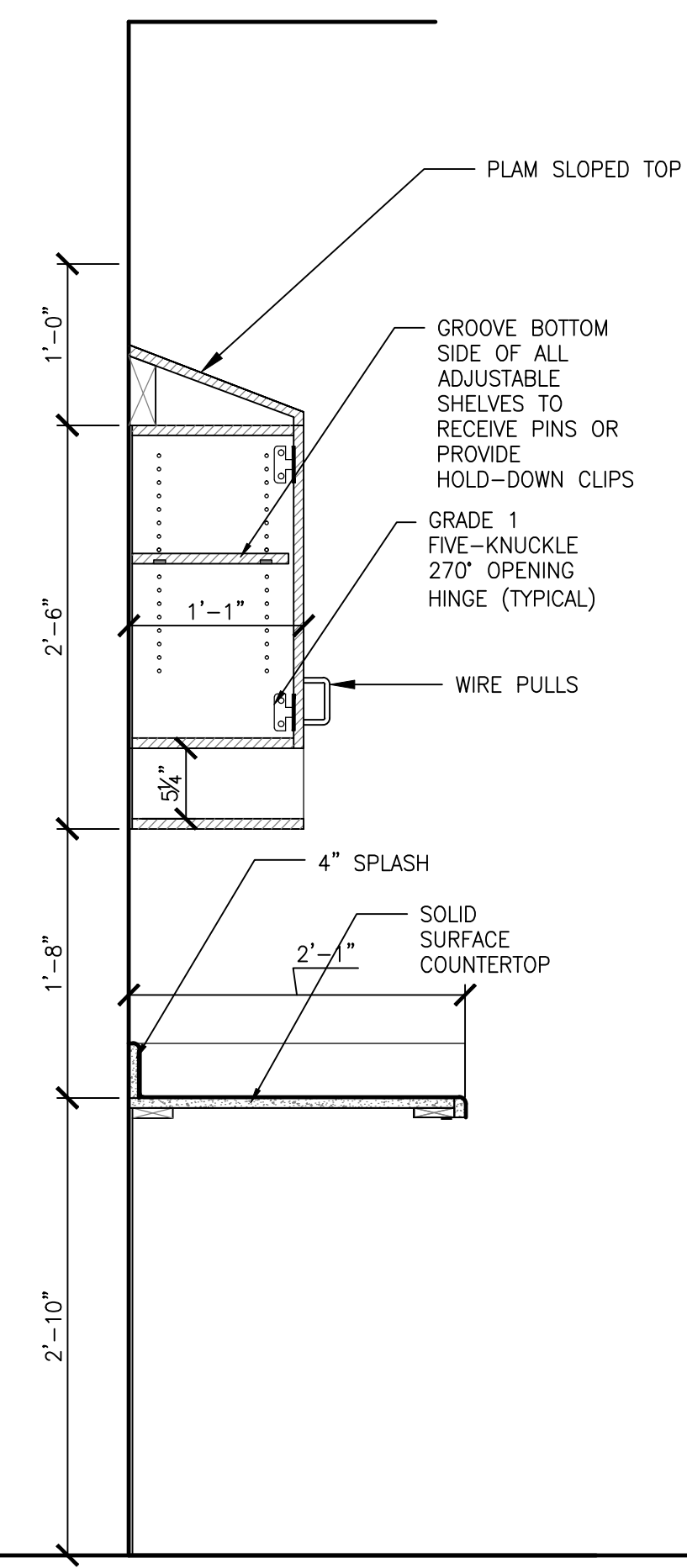
3 MILLWORK DETAILS
SCALE: 1" = 1'-0"



4 MILLWORK DETAILS
SCALE: 1" = 1'-0"



5 MILLWORK DETAILS
SCALE: 1" = 1'-0"



6 MILLWORK DETAILS
SCALE: 1" = 1'-0"

DEFINE

MECHANICAL ABBREVIATIONS

AD	ACCESS DOOR	HWS	HEATING HOT WATER SUPPLY
ADA	AMERICANS WITH DISABILITIES ACT	HWR	HEATING HOT WATER RETURN
AFF	ABOVE FINISHED FLOOR	KH	KITCHEN HOOD
AHU	AIR HANDLING UNIT	KW	KILOWATT
APD	AIR PRESSURE DROP	LAT	LEAVING AIR TEMPERATURE
BOD	BOTTOM OF DUCT	LWT	LEAVING WATER TEMPERATURE
BOP	BOTTOM OF PIPE	MBH	1000 BRITISH THERMAL UNITS PER HOUR
BTUH	BRITISH THERMAL UNITS PER HOUR	MVD	MANUAL VOLUME DAMPER
C	CONDENSATE	N.O.	NORMALLY OPEN
CFM	CUBIC FEET PER MINUTE	N.C.	NORMALLY CLOSED
CT	CHILLER	NTS	NOT TO SCALE
CHS	CHILLED WATER SUPPLY	NC	NOISE CRITERIA
CHR	CHILLED WATER RETURN	OA	OUTSIDE AIR
COP	COEFFICIENT OF PERFORMANCE	OBD	OPPOSED BLADE DAMPER
CT	COOLING TOWER	PD	PRESSURE DROP
CU	CONDENSING UNIT	PHWR	PLANT HEATING HOT WATER RETURN
CV	CONSTANT VOLUME	PHWS	PLANT HEATING HOT WATER SUPPLY
CS	CONDENSER WATER SUPPLY	PRV	PRESSURE REDUCING VALVE
CR	CONDENSER WATER RETURN	PSIG	POUNDS PER SQUARE INCH GAGE
DB	DRY BULB	RA	RETURN AIR
DOAS	DEDICATED 100% OUTSIDE AIR UNIT	RH	RELATIVE HUMIDITY
EA	EXHAUST AIR	RHC	REHEAT COIL
EAT	ENTERING AIR TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
ECO	EXTERIOR CLEANOUT	RTU	ROOFTOP A/C UNIT
EDH	ELECTRIC DUCT HEATER	SA	SUPPLY AIR
EER	ENERGY EFFICIENCY RATIO	SD	STORM DRAIN
EF	EXHAUST FAN	SEER	SEASONAL ENERGY EFFICIENCY RATIO
EMS	ENERGY MANAGEMENT SYSTEM	SF	SUPPLY FAN
ESP	EXTERNAL STATIC PRESSURE	SP	STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER	SWR	SIDE WALL REGISTER
EWC	ELECTRIC WATER COOLER	TSP	TOTAL STATIC PRESSURE
EWB	ELECTRIC WATER HEATER	TYP	TYPICAL
EWT	ENTERING WATER TEMPERATURE	UNO	UNLESS NOTED OTHERWISE
F	FAHRENHEIT	VAV	VARIABLE AIR VOLUME
FCO	FLOOR CLEANOUT	VFD	VARIABLE FREQUENCY DRIVE
FD	FLOOR DRAIN	VRF	VARIABLE REFRIGERANT FLOW
FLA	FULL LOAD AMPS	WB	WET BULB
FFE	FINISHED FLOOR ELEVATION	WG	WATER GAGE
FPI	FINS PER INCH	WPD	WATER PRESSURE DROP
HP	HORSEPOWER		

DESIGN

MECHANICAL LEGEND

GRILLES, REGISTERS, DIFFUSERS, AND LOUVERS				EQUIPMENT			
EXISTING	DEMO	NEW	DESCRIPTION	EXISTING	DEMO	NEW	DESCRIPTION
		A100	GRILLE DESIGNATION AND CFM				MECHANICAL EQUIPMENT. REFER TO SCHEDULES.
			SURFACE MOUNT				IONIZATION UNIT
							SMOKE DETECTOR
			LAY-IN SUPPLY CEILING DIFFUSER				MANUAL PULL STATION
CONTROLS							
EXISTING	DEMO	NEW	DESCRIPTION	EXISTING	DEMO	NEW	DESCRIPTION
			LINEAR SLOT DIFFUSER				THERMOSTAT
			RETURN/EXHAUST CEILING GRILLE				HUMIDISTAT
			RETURN/EXHAUST WALL GRILLE				SENSOR
			EXHAUST LOUVER				STATIC PRESSURE SENSOR
			EXHAUST WALL CAP				REMOTE TEMPERATURE SENSOR
			GRAVITY RELIEF HOOD				WALL SWITCH
			INTAKE LOUVER				CONTROL WIRING
			INTAKE WALL CAP				
			GRAVITY INTAKE HOOD				
DUCTWORK							
EXISTING	DEMO	NEW	DESCRIPTION				
			RECTANGULAR DUCTWORK. REFER TO PLANS FOR SIZE.				
			ROUND DUCTWORK. REFER TO PLANS FOR SIZE.				
			ROUND DUCTWORK DROP/RISE.				
			DUCT DROP/RISE				
PIPING							
EXISTING	DEMO	NEW	DESCRIPTION				
			CHILLED WATER SUPPLY PIPING				
			CHILLED WATER RETURN PIPING				
			HOT WATER SUPPLY PIPING				
			HOT WATER RETURN PIPING				
			CONDENSER WATER SUPPLY PIPING				
			CONDENSER WATER RETURN PIPING				
DAMPERS							
EXISTING	DEMO	NEW	DESCRIPTION				
			BALANCING DAMPER				
			MOTORIZED DAMPER				
			FIRE DAMPER				
			SMOKE DAMPER				
			FIRE & SMOKE DAMPER				
NOTES: 1. EXISTING ITEMS ON DEMO PLANS ARE "EXISTING TO REMAIN" UNLESS NOTED "EXISTING TO BE RELOCATED." 2. ITEMS ON NEW CONSTRUCTION PLANS ARE NEW UNLESS NOTED "RELOCATED FROM PREVIOUS LOCATION". 3. REFER TO SCHEDULES FOR GRILLE, REGISTER, DIFFUSER, AND LOUVER SIZES. 4. REFER TO DRAWINGS FOR DIRECTION OF AIRFLOW FOR DIFFUSERS. IF DIRECTIONAL ARROWS ARE NOT INCLUDED, AIRFLOW IS IN FOUR DIRECTIONS. (4-WAY GRILLE) 5. WALL MOUNTED CONTROL DEVICES SHALL BE MOUNTED AT 48" A.F.F. 6. NOT ALL ITEMS SHOWN ON THIS LIST MAY BE APPLICABLE TO THIS PROJECT.							

DELIVER

MECHANICAL GENERAL NOTES

- CONTRACTOR SHALL VISIT THE SITE AND DETERMINE THE EXTENT OF DEMOLITION WORK AND NEW WORK NEEDED FOR THIS PROJECT, PRIOR TO SUBMITTING BID.
- CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT SCOPE, CONSTRAINTS, UTILITY CONNECTIONS, AND BUILDING SERVICES, PRIOR TO SUBMITTING BID.
- CONTRACTOR SHALL GIVE FIRST RIGHT TO REFUSAL OF SALVAGE TO THE OWNER. IF THE OWNER ELECTS TO NOT KEEP SALVAGE, CONTRACTOR SHALL REMOVE SALVAGE BY LAWFUL MEANS.
- DRAWINGS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE. DRAWINGS SHALL NOT BE SCALED. COORDINATE ROUTING OF SERVICES WITH SITE CONDITIONS AND WITH WORK OF OTHER TRADES.
- FIELD VERIFY DIMENSIONS PRIOR TO ORDERING, FABRICATING, AND ERECTION OF MATERIAL AND/OR EQUIPMENT. NOTIFY THE ENGINEER OF DISCREPANCIES IN A TIMELY MANNER.
- VERIFY CLEARANCE REQUIREMENTS AND ROUTING OF DUCTWORK AND PIPING PRIOR TO FABRICATION, AS MINOR MODIFICATIONS SUCH AS DUCT AND/OR PIPING RISES AND DROP MAY BE REQUIRED DUE TO FIELD CONDITIONS. MAKE MINOR MODIFICATIONS TO THE BUILDING, PIPING, SPRINKLER, DUCTWORK, ELECTRICAL, ETC. AS SHOWN ON THE DRAWINGS OR REQUIRED TO COMPLETE THE INSTALLATION OF A COMPLETED WORKABLE SYSTEM.
- MAINTAIN WEATHER-TIGHT BARRIERS TO PREVENT DAMAGE FROM THE ELEMENTS DURING DEMOLITION AND NEW CONSTRUCTION PERIOD.
- SEAL PENETRATIONS THROUGH THE BUILDING ENVELOPE.
- PENETRATIONS THROUGH RATED WALLS, FLOORS, PARTITIONS AND ASSEMBLIES SHALL BE INSTALLED AND FIRESAFED TO MEET UL. FIRE RESISTANCE LISTING AND NFPA. REQUIREMENTS FOR THE PENETRATION.
- COORDINATE DEVICES REQUIRING ACCESS PANELS WITH THE ARCHITECT AND OTHER TRADES.
- MAINTAIN MINIMUM CLEARANCE 10'-0" BETWEEN OUTSIDE INTAKES AND EXHAUST OUTLETS AND PLUMBING VENTS.
- COORDINATE FINAL LOCATIONS AND ELEVATIONS WITH THE ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE FINAL FINISH COLORS OF MATERIALS, DEVICES, DIFFUSER, GRILLES, LOUVERS, AND/OR EQUIPMENT WITH THE ARCHITECT PRIOR TO ORDERING, FABRICATION AND INSTALLATION.
- SCHEDULE UTILITY SERVICES SHUTDOWNS WITH OWNER AND ARCHITECT. MINIMIZE DISRUPTIONS AND DOWNTIME TO THE OWNER.
- INSTALL DEVICES AND EQUIPMENT TO MEET ADA REQUIREMENTS.
- ROUTE DUCT AND PIPING CONCEALED IN INTERSTITIAL SPACE UNLESS NOTED OTHERWISE.
- DOCUMENT LOCATIONS OF DEVICES, DUCT, PIPING, AND EQUIPMENT ON "AS-BUILT" RECORD DRAWINGS AS PER THE SPECIFICATIONS.
- PAY FOR SERVICE, DEPOSITS, INSPECTION, AND CONNECTION FEES REQUIRED FOR A COMPLETE INSTALLATION. COORDINATE WITH THE UTILITY SERVICE PROVIDER FOR THE REQUIREMENTS NEEDED FOR THIS PROJECT.
- HVAC SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH NFPA 90A AND NFPA 101.
- WORK SHOWN IN THE DRAWINGS SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, AND LOCAL ORDINANCES AND CODES.

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CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospita St Elizabeth

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 05/16/2022	
REVISION:	
DATE:	
REVISION:	
DATE:	
REVISION:	
DATE:	

DRAWINGS SHEET TITLE

MECHANICAL LEGEND & GENERAL NOTES

SHEET NUMBER

M0.0

20132

PROJECT NUMBER

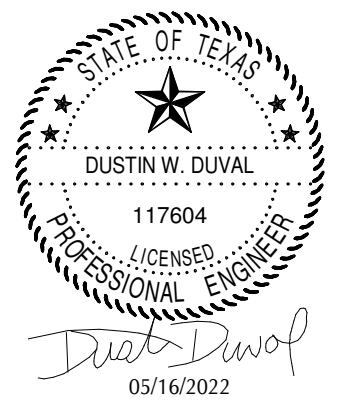


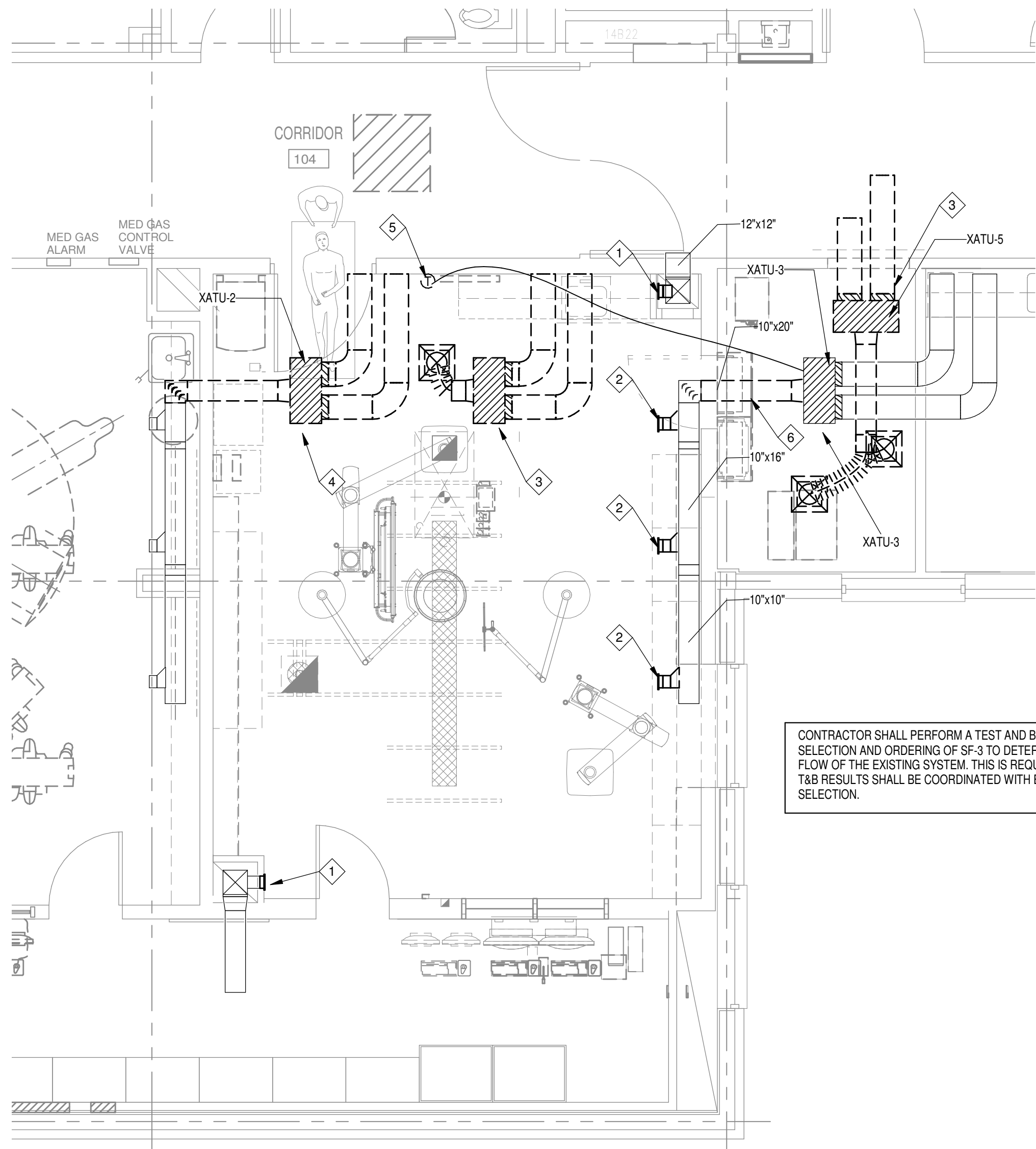
1304 BERTRAND DRIVE SUITE F7
LAFAYETTE, LOUISIANA 70506
(337) 234-7474 * FAX (337) 234-7774
Mechanical Contact:
Electrical Contact: David Carroll, P.E.
david@meconsulting.com
PROJECT No.: 21197.00





3875 Peachtree Dunwoody
Atlanta, Georgia 30328
Beaumont, Texas 77701
TEL: (409) 882-7146
FAX: (409) 882-7145
J. ROB CLARK, AIA
RONALD N. JONES, AIA
www.aarchitect.com



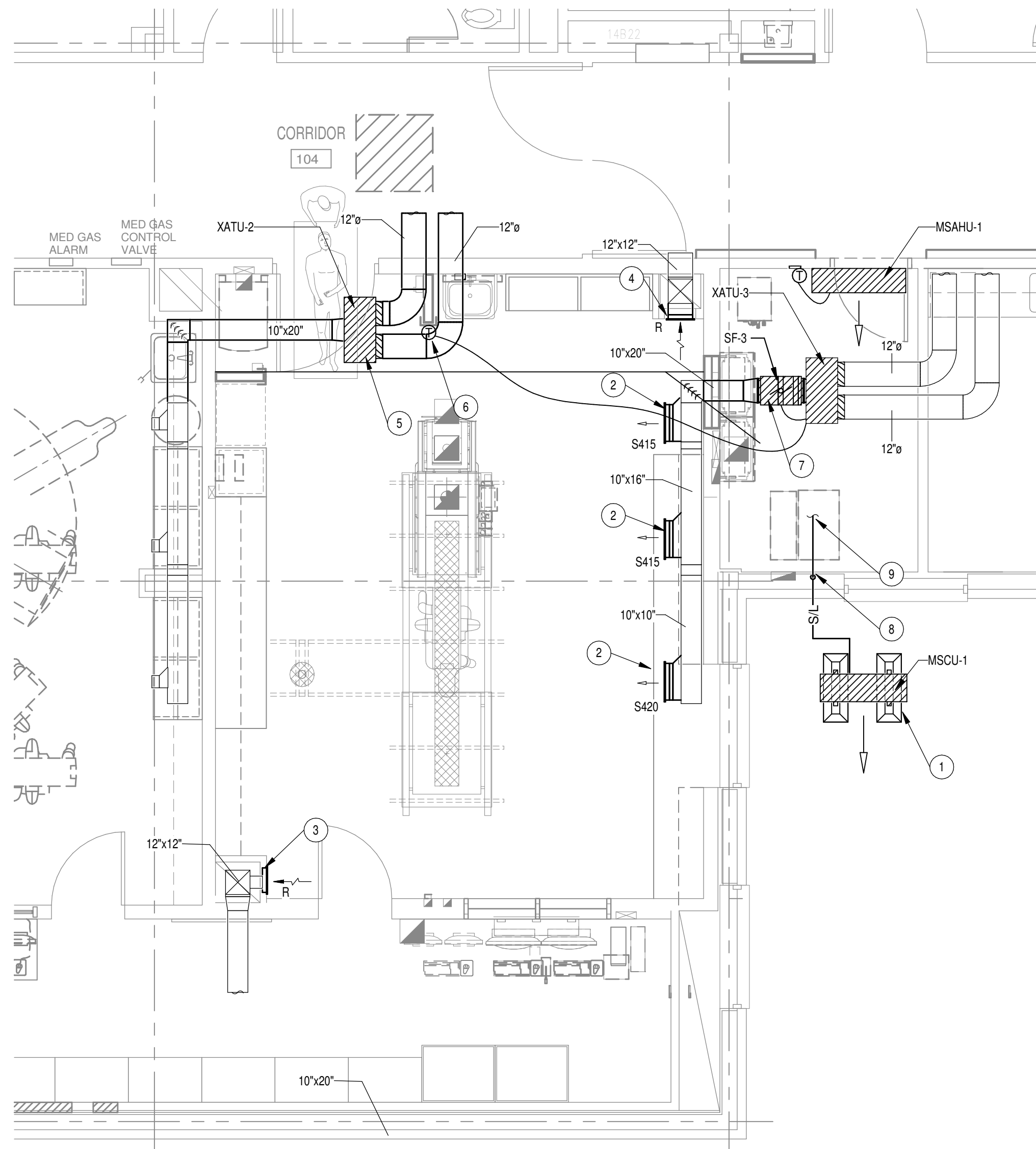


CONTRACTOR SHALL PERFORM A TEST AND BALANCE ON ATU-3 BEFORE FINAL SELECTION AND ORDERING OF SF-3 TO DETERMINE STATIC PRESSURE AND AIR FLOW OF THE EXISTING SYSTEM. THIS IS REQUIRED FOR PROPER FAN SELECTION. T&B RESULTS SHALL BE COORDINATED WITH ENGINEER TO CONFIRM FAN SELECTION.

① Mechanical Demolition Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

MECHANICAL DEMOLITION KEYNOTES

- 1 REMOVE EXISTING RETURN GRILLE. CAP AND PRESERVE DUCT IN CHASE FOR NEW RETURN GRILLE OF THE SAME SIZE.
- 2 REMOVE EXISTING SUPPLY GRILLE. CAP AND PRESERVE DUCT IN FURRING FOR NEW SUPPLY GRILLE OF THE SAME SIZE.
- 3 REMOVE DUAL DUCT VAV BOX AND ASSOCIATED DUCT WORK, GRILLES, ACCESSORIES, CAP AND SEAL DUCT AT MAIN HOT AND COLD AIR SUPPLY TRUNK LINE.
- 4 REMOVE AND SALVAGE DUAL DUCT VAV BOX. REFER TO VIEW 2 ON THIS SHEET FOR NEW LOCATION.
- 5 REMOVE AND SALVAGE THERMOSTAT. REFER TO VIEW 2 ON THIS SHEET FOR NEW LOCATION.
- 6 SUPPLY DUCT IN THIS VICINITY SHALL BE REWORKED TO ACCOMODATE NEW INLINE SUPPLY FAN SHOWN IN VIEW 2 ON THIS SHEET. SALVAGE AS MUCH DUCT WORK AND INSULATION AS POSSIBLE.



② Mechanical Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

MECHANICAL KEYNOTES

- 1 NEW CONDENSING UNIT MOUNTED ON ROOF IN THIS VICINITY. CONDENSING UNIT SHALL SIT ON ROOF SLEEPERS AND SHALL BE ANCHORED TO ROOF. COORDINATE FINAL LOCATION AND REFRIGERANT ROUTING WITH OWNER.
- 2 NEW SUPPLY GRILLE SHALL BE CONNECTED TO EXISTING SUPPLY DUCT IN THIS VICINITY. GRILLES SHALL USE EXISTING WALL PENETRATIONS. PATCH AND REPAIR WALL AS NEEDED DUE TO NEW GRILLE MOUNTING.
- 3 NEW RETURN GRILLE SHALL BE CONNECTED TO EXISTING RETURN DUCT IN THIS VICINITY. GRILLE SHALL USE EXISTING WALL PENETRATIONS. PATCH AND REPAIR WALL AS NEEDED DUE TO NEW GRILLE MOUNTING.
- 4 NEW RETURN GRILLE SHALL BE CONNECTED TO EXISTING RETURN DUCT IN THIS VICINITY. GRILLE SHALL HAVE NEW WALL PENETRATION ON PLAN SOUTH SIDE OF CHASE. PATCH AND REPAIR OLD WALL PENETRATION AS NEEDED.
- 5 SALVAGED VAV BOX SHALL BE RELOCATED TO THIS VICINITY. EXTEND AND CONNECT SUPPLY DUCT TO EXISTING SUPPLY DUCT AS SHOWN.
- 6 SALVAGED THERMOSTAT SHALL BE RECONNECTED TO EXISTING CONTROL WIRING FOR VAV BOX IN THIS VICINITY.
- 7 NEW INLINE SUPPLY FAN WITH VFD CONTROL INTERLOCKED WITH EXISTING DUAL DUCT VAV BOX CONTROLS. EXTEND AND CONNECT EXISTING SUPPLY DUCT TO INLINE FAN AS NEEDED TO COMPLETE A WORKING SYSTEM.
- 8 PROVIDE A WALL MOUNTED OUTLET FOR REFRIGERANT PIPING THROUGH THE EXTERIOR WALL. REFER TO DETAIL FOR ADDITIONAL INFORMATION.(TYPICAL)
- 9 EXTEND REFRIGERANT PIPING TO RESPECTIVE AIR HANDLING UNIT.

1304 BERTRAND DRIVE SUITE F7
LA FAYETTE, LOUISIANA 70506
(337) 234-7474 * FAX (337) 234-7774

Mechanical Contact:
Electrical Contact: David Carroll, P.E.
david@meconsulting.com

PROJECT No.: 21197.00

CONSULTING

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

2830 CALDER AVENUE

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 05/16/2022	
REVISION:	
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DRAWINGS SHEET TITLE

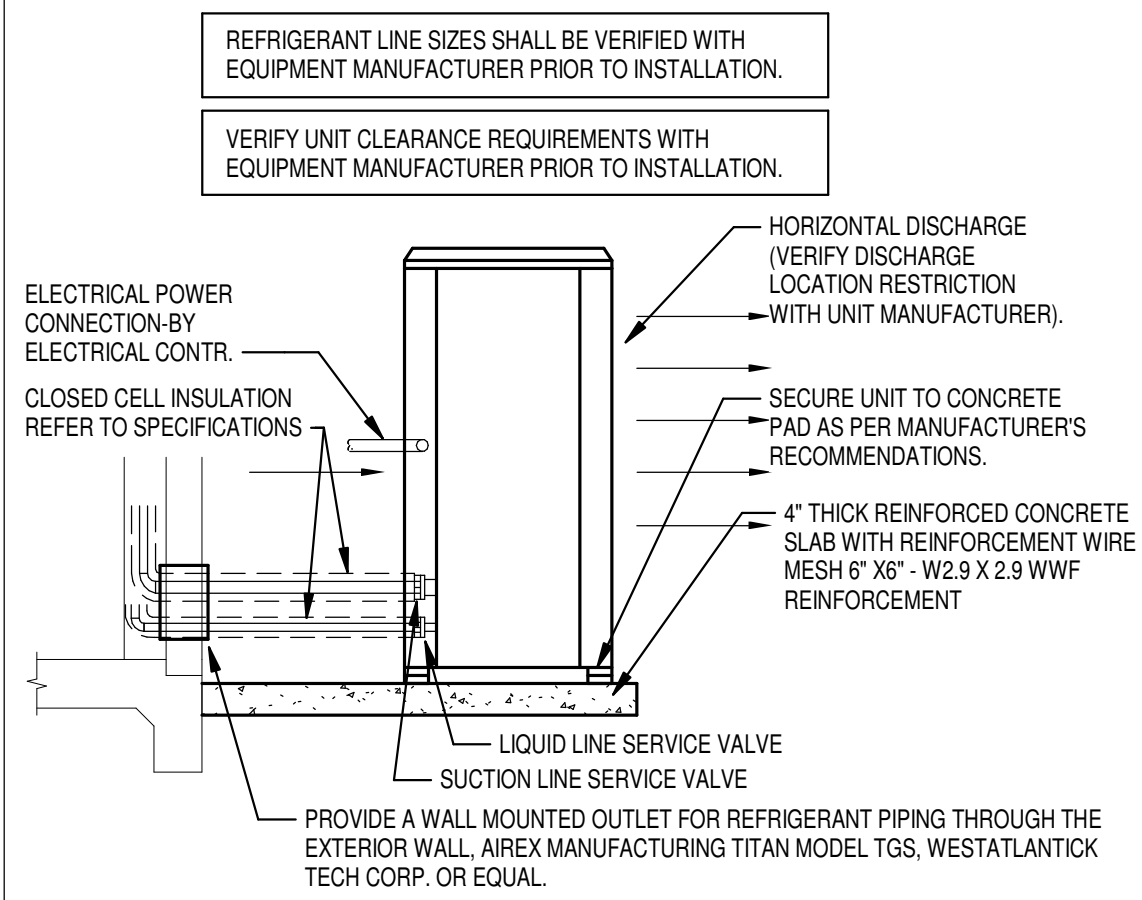
MECHANICAL PLAN

SHEET NUMBER

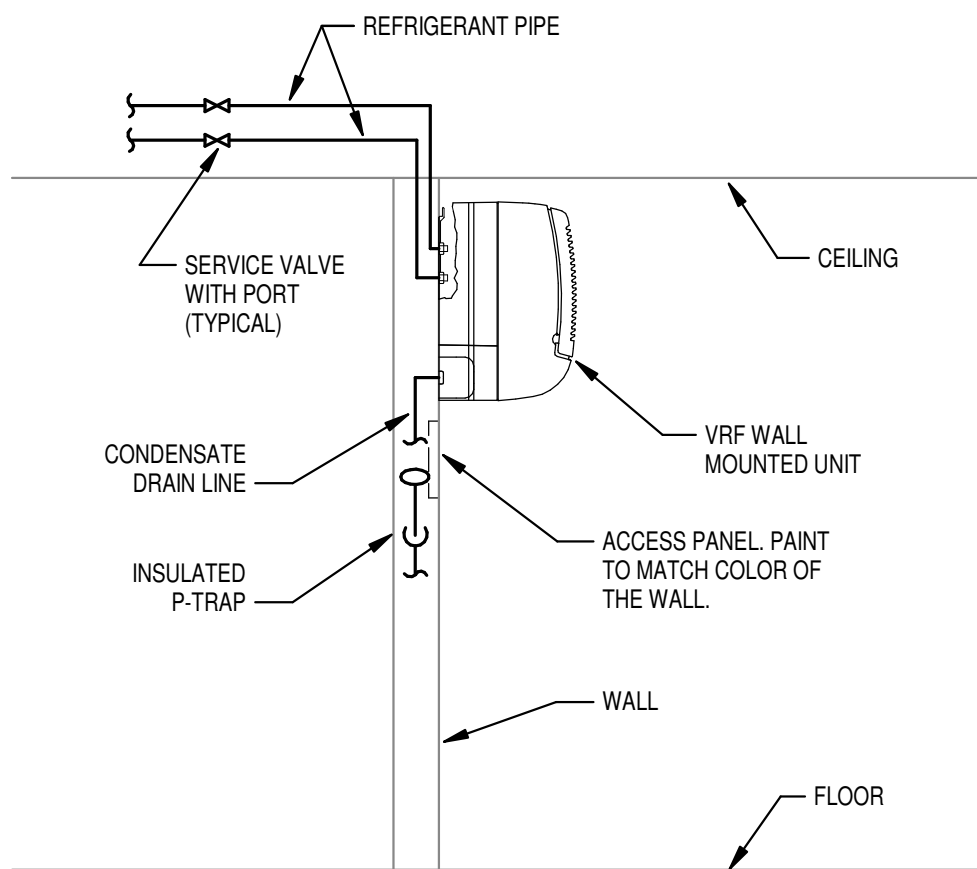
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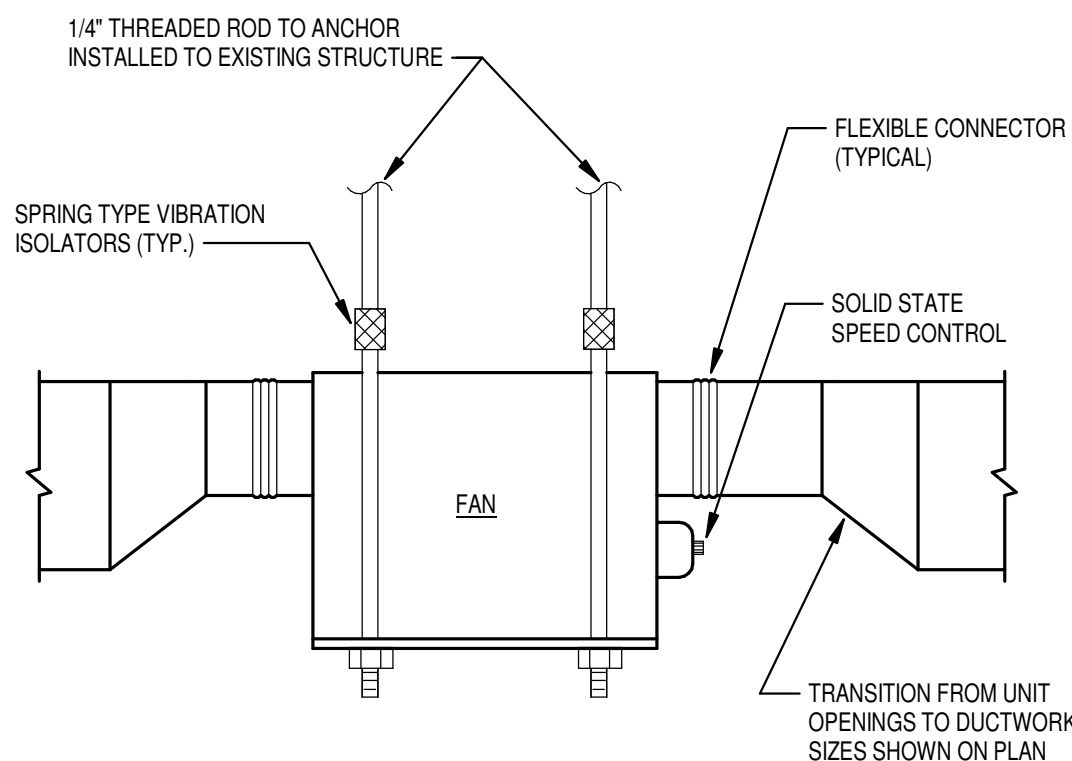
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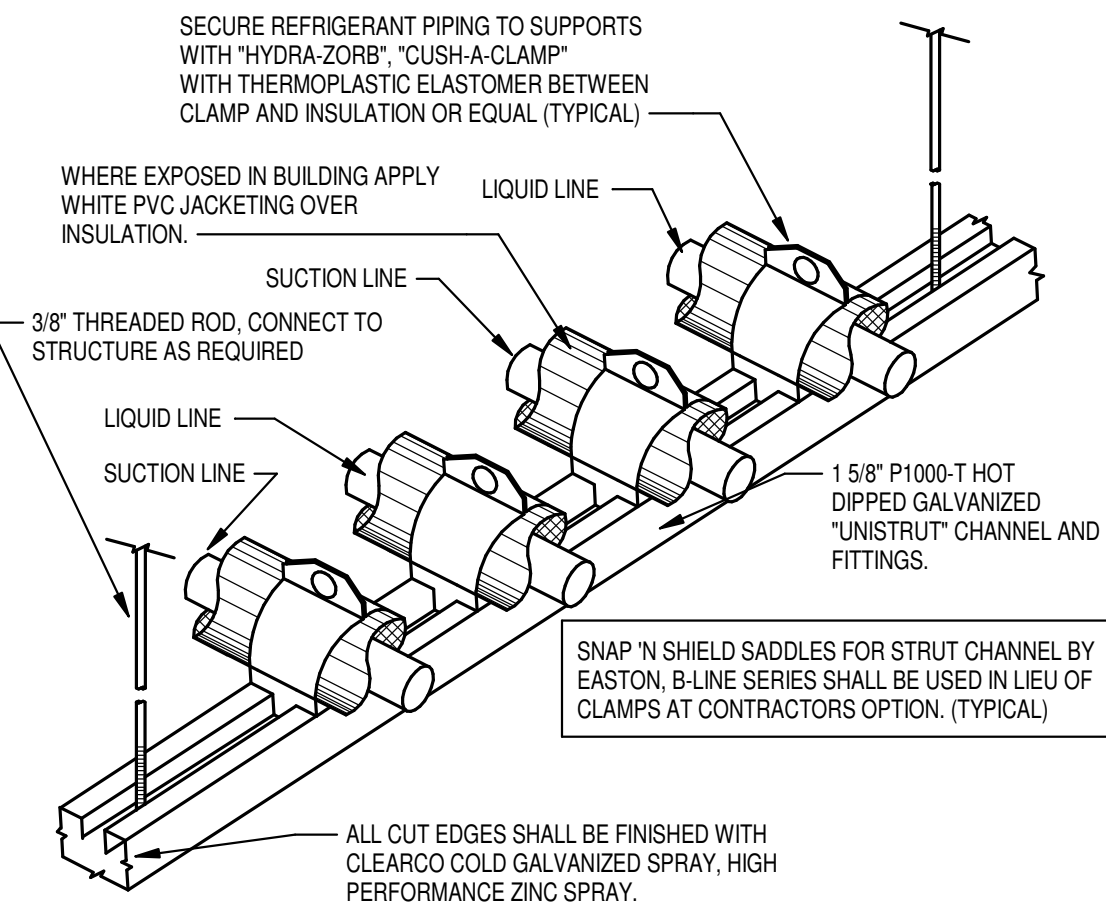
1 CONDENSING UNIT DETAIL (MINI-SPLIT) NO SCALE



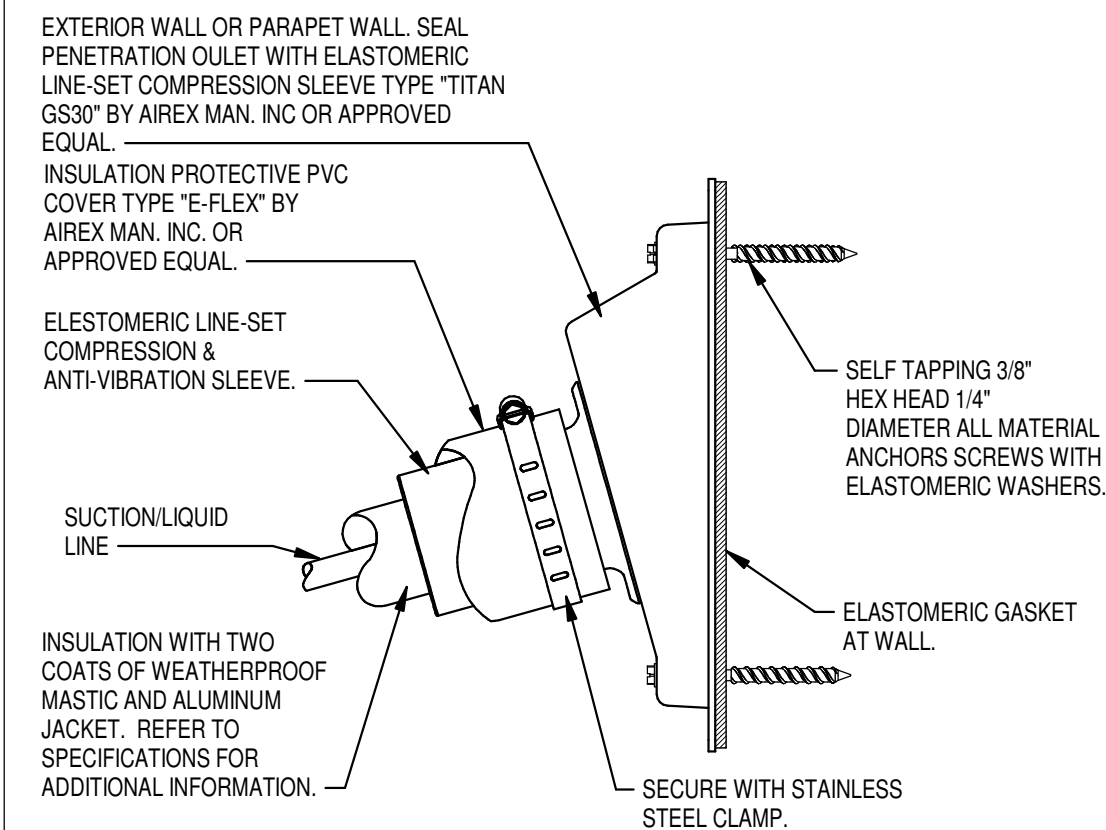
2 VRF - WALL MOUNTED UNIT DETAIL NO SCALE



3 IN-LINE CEILING FAN INSTALLATION DETAIL NO SCALE



4 VRF SYSTEM INDOOR REFRIGERATION PIPE SUPPORT NO SCALE



5 VRF EXTERIOR REFRIGERANT PIPING PENETRATION DETAIL NO SCALE

DUCTLESS DX MINI-SPLIT - OUTDOOR UNIT SCHEDULE

UNIT NO.	SERVICE	MIN. BTU/H OUTPUT	AMB. TEMP. (F°)	VOLTAGE	PHASE	MCA	S.E.E.R.	BASIS OF DESIGN
MSCU-1	CATH LAB 1 EQUIPMENT ROOM	36000	95	208	1	25.0	17	MTSUBISHI PUZ-A36NKA7

NOTES:

- OUTDOOR UNIT PROVIDES POWER TO THE INDOOR UNIT. INSTALL UNIT AS PER MANUFACTURER'S REQUIREMENTS.
- INSTALL ON ROOF SLEEPERS BETWEEN UNIT AND ROOF AT MOUNTING POINTS AND ANCHOR TO ROOF.
- PROVIDE A WALL MOUNTED OUTLET FOR EACH REFRIGERANT PIPING SET THROUGH THE EXTERIOR WALL. AIREX MANUFACTURING TITAN MODEL TGS, WESTATLANTIC TECH CORP. OR EQUAL.

DUCTLESS DX MINI-SPLIT - INDOOR UNIT SCHEDULE

UNIT NO.	SERVICE	FAN				COOLING			HEATING			BASIS OF DESIGN
		FAN CFM HIGH	FAN CFM LOW	UNIT MCA	VOLTAGE	PHASE	MIN. BTU/H OUTPUT	AMB. TEMP. (°F)	EAT (°F) DB WB	MIN. BTU/H OUTPUT	AMB. TEMP. (°F)	
MSAHU-1	CATH LAB 1 EQUIPMENT ROOM	920	705	1.00	208	1	34000	95	80 67	37000	47	MTSUBISHI PKA-A36KA7

NOTES:

- UNIT SHALL BE PROVIDED WITH HARD WIRED REMOTE CONTROLLERS. CONTROLLERS SHALL BE ABLE OF SENSING TEMPERATURE.
- WALL MOUNTED UNITS SHALL BE MOUNTED WITH TOP OF UNIT ±1'-0" BELOW CEILING.
- REFRIGERANT SHALL BE R-410A.
- UNIT SHALL BE PROVIDED WITH AIR OUTLET SHUTTER PLATES WHERE AIR FLOW IS DUCTED FROM THE UNIT OR WHERE DIRECTION FLOW ARROWS ARE NOT SHOWN.
- CEILING RECESSED UNITS SHALL BE PROVIDED WITH INTEGRAL CONDENSATE PUMP.
- CEILING RECESSED AND WALL MOUNTED UNITS SHALL BE PROVIDED WITH LIFE LONG FILTER WITHIN THE UNIT.
- PROVIDE ONE (1) SPARE LIFE LONG FILTER TO OWNER FOR EACH UNIT THAT HAS A LIFE LONG FILTER.
- CONTRACTOR SHALL REMOVE THE PLASTIC CONDENSATE HOSE CLAMP (AT UNIT CONNECTION) ON EACH INDOOR UNIT. FURNISH AND INSTALL A STAINLESS STEEL HOSE CLAMP ON THE CONDENSATE DRAIN HOSE (AT UNIT CONNECTION) ON EACH INDOOR UNIT. THE STAINLESS STEEL HOSE CLAMP SHALL BE APPROPRIATELY SIZED TO CREATE A WATER TIGHT SEAL.
- CASSETTE UNITS SHALL CYCLE FAN ON/OFF WITH CALL FOR COOLING/HEATING. ADJUST DIP-SWITCH ON EACH UNIT AS REQUIRED TO ALLOW THE FAN TO BE OFF WHEN NO CALL FOR COOLING/HEATING.
- INDOOR UNIT RECEIVES POWER FROM THE OUTDOOR UNIT. INSTALL UNIT AS PER MANUFACTURER'S REQUIREMENTS.

FAN SCHEDULE

UNIT NO.	SERVICE	MIN. CFM	EXT SP	RPM	SONES	FAN H.P.	TYPE	DRIVE	VOLTAGE	PHASE	CONTROL	MANUFACTURER	MODEL
SF-3	ATU-3	1250	1.00	2761	20	0.75	INLINE	VFD	120	1	ATU-3	COOK	100SQN28D (VF)

NOTES:

- PROVIDE FAN WITH INTEGRAL BACK-DRAFT DAMPER, VFD CONTROL, SPRING TYPE ISOLATORS.
- FAN SHALL BE INTERLOCKED WITH DUAL DUCT VAV BOX DAMPER CONTROL WITH VFD.
- PRE-CONSTRUCTION TEST AND BALANCE SHALL BE PERFORMED ON ATU-3 TO CONFIRM EXISTING PRESSURES AND AIR FLOWS AND COORDINATED WITH ENGINEER BEFORE ORDERING THIS FAN. T&B REPORT MAY ALTER THE FAN SELECTION.

DIFFUSER/GRILLE SCHEDULE

SYMBOL	SIZE	SERVICE	LOCATION	FINISH	O.B.D.	BASIS OF DESIGN
R	12"X12"	RETURN	WALL	WHITE	O.B.D.	TITUS 355FL-1
S	18"X6"	SUPPLY	WALL	WHITE	O.B.D.	TITUS 1700FS-1

NOTES:

- COORDINATE FINAL FINISHES AND COLOR WITH ARCHITECT.
- REFER TO PLANS FOR DIRECTION OF AIR FLOW FOR GRILLES. IF DIRECTION IS NOT INDICATED, AIR FLOW IS IN FOUR DIRECTION (4-WAY GRILLE).
- COORDINATE FINAL LOCATIONS WITH REFLECTIVE CEILING PLANS. REFER TO ARCHITECTURAL DRAWINGS.
- ALL DIFFUSERS SHALL HAVE ALUMINUM CONSTRUCTION.

MECHANICAL SPECIFICATIONS NOTES:

- ALL MECHANICAL WORK SHALL CONFORM TO THE APPLICABLE PORTIONS OF THE INTERNATIONAL MECHANICAL CODE, NFPA, ASHRAE, NEG, ASME, IBC AND UL.
- CONTRACTOR SHALL PERFORM THE TESTING, ADJUSTING AND BALANCING OF THE HVAC SYSTEM IN ACCORDANCE WITH THE NATIONAL STANDARDS FOR FIELD MEASUREMENT AND INSTRUMENTATION. TOTAL SYSTEM BALANCE AS PUBLISHED BY THE ASSOCIATED AIR BALANCE COUNCIL.
- CONTRACTOR SHALL LABEL ALL EQUIPMENT WITH A PERMANENT LAMINATED PLATE. UNITS SHALL BE LABELED AS INDICATED ON THE DRAWINGS AND SCHEDULES.
- INSULATE ALL SUPPLY, OUTSIDE AIR AND EXHAUST DUCTWORK ON OUTSIDE WITH 2.125" THICK 3/4 # DENSITY FIBERGLASS WRAP INSULATION WITH ALUMINUM FOIL VAPOR BARRIER. INSULATION SHALL BE TAPED AT ALL JOINTS AND INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL TEST REFRIGERANT LINES UNDER 200 PSI CARBON DIOXIDE PRESSURE FOR 5 HOURS USING SOAP SUDS AT JOINTS TO TEST FOR LEAKS. EVACUATE SYSTEM AND CHARGE WITH REFRIGERANT.

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(337) 234-7474 * FAX (337) 234-7774

Mechanical Contact:
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PROJECT No.: 21197.00



CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

ISSUED FOR SCHEMATIC DESIGN ☐
DATE: _____

DESIGN DEVELOPMENT ☐
DATE: _____

BIDS & CONSTRUCTION ☒
DATE: 05/16/2022

REVISION: _____
DATE: _____

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DATE: _____

DRAWINGS SHEET TITLE

MECHANICAL DETAILS & SCHEDULES

SHEET NUMBER

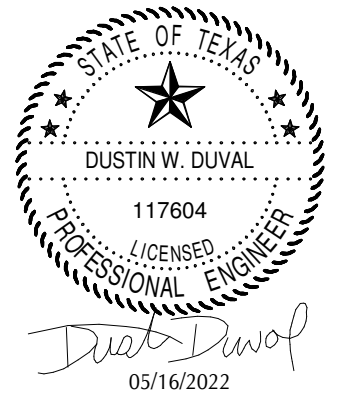
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PROJECT NUMBER

3875 Peachtree Dunwoody Rd
Suite 770
Atlanta, GA 30328
Tel: 404.886.7446
Fax: 404.886.7445
www.architecturalalliance.com

ARCHITECTURAL ALLIANCE INCORPORATED



ELECTRICAL ABBREVIATIONS


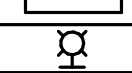
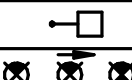
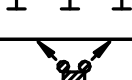
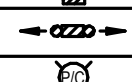
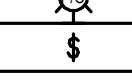
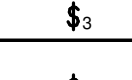
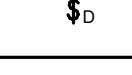

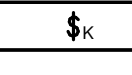
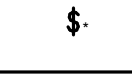
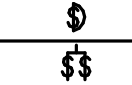
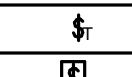

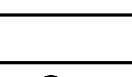
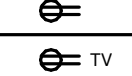
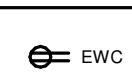
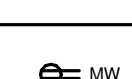
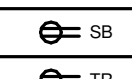
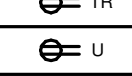

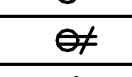

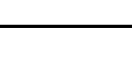
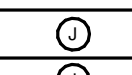
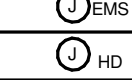

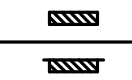
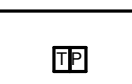


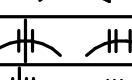



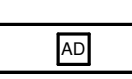
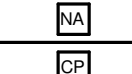
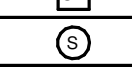

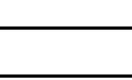

CT	DENOTES COUNTER-TOP-HEIGHT MOUNTED. CONTRACTOR TO VERIFY COUNTER TOP HEIGHT AND HEIGHT OF BACK SPLASH.
E	DENOTES EMERGENCY DEVICE
G	DENOTES GROUND FAULT INTERRUPTER PROTECTED
WP	DENOTES WEATHERPROOF
AFF	DENOTES ABOVE FINISHED FLOOR
C	DENOTES CONDUIT
A	DENOTES AMP
EWC	ELECTRICAL WATER COOLER
W	WALL MOUNTED-48" ABOVE FINISHED FLOOR OR AS NOTED
CB	CODE BLUE
IG	DENOTES ISOLATED GROUND
FDS	FUSED DISCONNECT SWITCH
BOF	BOTTOM OF FIXTURE
MRR	MANUFACTURER'S RECOMMENDED RATING
WR	WEATHER RESISTANT
VOJ	VERIFY ON JOB
VR	VANDAL RESISTANT
SPD	SURGE PROTECTION DEVICE - REFER TO SPECIFICATIONS.

     SCREENED LINES/SYMBOLS INDICATE EXISTING DEVICES TO REMAIN.

     DASHED LINES/SYMBOLS INDICATE EXISTING DEVICES TO BE REMOVED OR RELOCATED.

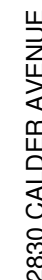
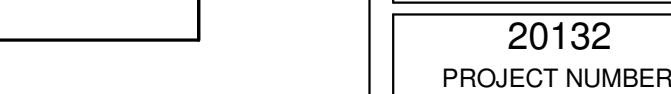
     BOLD LINES/SYMBOLS INDICATE NEW OR RELOCATED DEVICES.

ELECTRICAL LEGEND

LIGHTING DESCRIPTION		SPECIAL SYSTEMS DESCRIPTION	
	LIGHTING FIXTURE-REFER TO LIGHTING FIXTURE SCHEDULE		
	LIGHTING FIXTURE-REFER TO LIGHTING FIXTURE SCHEDULE	∞ xx	COMMUNICATIONS OUTLET - DEEP 4" SQUARE BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 1" CONDUIT TO ACCESSIBLE CEILING (18" A.F.F. OR AS NOTED) - PROVIDE A BLANK PLATE OR XX DENOTES CABLE TYPE AND QUANTITY; P=PHONE, D=DATA, C=COAX REFER TO SPECIFICATIONS
	LIGHTING FIXTURE-REFER TO LIGHTING FIXTURE SCHEDULE		
	LIGHTING FIXTURE-REFER TO LIGHTING FIXTURE SCHEDULE		
	CEILING MOUNTED EXIT LIGHT - REFER TO LIGHTING FIXTURE SCHEDULE - ARROWS DEFINE DIRECTION	TV xx	TELEVISION OUTLET-DEEP 4" SQUARE BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 1" C. TO ACCESSIBLE CEILING (VERIFY MOUNTING HEIGHT AND LOCATION WITH ARCHITECT) - PROVIDE BLANK PLATE OR XX DENOTES CABLE TYPE AND QUANTITY; P=PHONE, D=DATA, C=COAX REFER TO SPECIFICATIONS
	WALL MOUNTED EXIT LIGHT - COORDINATE FINAL MOUNTING HEIGHT WITH THE ARCHITECT - REFER TO LIGHTING FIXTURE SCHEDULE - ARROWS DEFINE DIRECTION	TJ xx	DATA JACK ABOVE CEILING W/ 30" OF SLACK (FUTURE WIRELESS ACCESS POINT) XX - DENOTES CABLE QUANTITY
	EMERGENCY LIGHT (8'-0" A.F.F. OR AS NOTED) - REFER TO LIGHTING FIXTURE SCHEDULE	AVI	AUDIO & VISUAL - DEEP 4" SQUARE DEEP DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (MOUNT 18" A.F.F. V.O.J.) WITH 1 1/4" CONDUIT WITH CABLE/PULLSTRING TO A MINIMUM OF 6" ABOVE CEILING.
	CEILING MOUNTED EGRESS LIGHT - REFER TO LIGHTING FIXTURE SCHEDULE	OP	OVERHEAD PROJECTOR - DEEP 4" SQUARE BOX INSTALLED ABOVE CEILING ADJACENT TO OVERHEAD PROJECTOR (SEE DETAIL)
	PHOTOCELL	AVI	AUDIO & VISUAL - RECESSED FLOOR BOX - WIREMOLD RFB9 OR EQUAL (SEE DETAIL)
	SINGLE POLE TOGGLE SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED)	SB	SMART BOARD J-BOX - 4" SQUARE DEEP BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 3/4" CONDUIT TO ACCESSIBLE CEILING. (SEE DETAIL)
	THREE-WAY TOGGLE SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED)	CS	CONTROL STATION - 4" SQUARE DEEP BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRINGS IN 3/4" CONDUIT TO ACCESSIBLE CEILING. (SEE DETAIL)
	MOTOR RATED SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED), CONTRACTOR TO PROVIDE SWITCH TO DE-ENERGIZE EACH CURRENT CARRYING CONDUCTOR. LOCATE ADJACENT TO EQUIPMENT BEING SERVED IN A READILY ACCESSIBLE LOCATION.		
	SINGLE POLE KEYED SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED)		
	SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED) COORDINATE TYPE AND INSTALLATION REQUIREMENTS WITH MANUFACTURE. COORDINATE LOCATION WITH OWNER.		
	SINGLE POLE SWITCH. MOUNT IN DOOR SWING. LEE ELECTRIC: 210DN		
	INBOARD AND OUTBOARD SWITCHING UNLESS NOTED OTHERWISE (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED)		
	SINGLE POLE DIGITAL PRESET COUNT DOWN TYPE TIMER SWITCH (48" A.F.F. TO CENTER OF DEVICE OR AS NOTED) SENSORSWITCH PTS 60 OR EQUAL		
	WALL MOUNTED OCCUPANCY SENSOR (48" AFF TO CENTER OF DEVICE OR AS NOTED) - REFER TO SPECIFICATIONS.		
	WALL MOUNTED DOUBLE SWITCH OCCUPANCY SENSOR (48" AFF TO CENTER OF DEVICE OR AS NOTED) - REFER TO SPECIFICATIONS.		
	CORNER MOUNTED OCCUPANCY SENSOR - MOUNTING HEIGHT TO BE DETERMINED PER MANUFACTURER'S RECOMMENDATIONS FOR OPTIMAL COVERAGE - MYTECH, WATT STOPPER		
	POWER DESCRIPTION		
	DUPLEX CONVENIENCE OUTLET (18" A.F.F. FOR GENERAL AREAS, 36" A.F.F. FOR GARAGES, HANGARS AND THE LIKE OR AS NOTED)		
	TELEVISION OUTLET (VERIFY MOUNTING HEIGHT AND LOCATION WITH ARCHITECT)		
	ELECTRICAL WATER COOLER; COORDINATE ELECTRICAL DEVICE/OUTLET TYPE AND LOCATION WITH PLUMBING CONTRACTOR (CONCEAL OUTLET/DEVICE BEHIND COOLER) OUTLET TO BE GROUND FAULT INTERRUPTER PROTECTED.		
	MICROWAVE OUTLET - RECESSED 20 AMP DUPLEX OUTLET. HUBBELL OR EQUAL. VERIFY EXACT MOUNTING LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH IN.		
	WATER HEATER; COORDINATE ELECTRICAL OUTLET/DISCONNECT TYPE AND LOCATION WITH PLUMBING CONTRACTOR		
	SMART BOARD OUTLET - SB DENOTES HEIGHT OF OUTLET PER OWNER		
	DUPLEX CONVENIENCE OUTLET (18" A.F.F. OR AS NOTED) TR DENOTES TAMPER RESISTANT - HUBBELL: RR205TR, GFR20 OR EQUAL		
	COMBINATION RECEPTACLE/OUTLET AND DUAL USB CHARGER - LEVITON T5832 OR EQUAL. (18" A.F.F. OR AS NOTED)		
	DOUBLE DUPLEX CONVENIENCE OUTLET (18" A.F.F. OR AS NOTED)		
	SPECIAL OUTLET (VERIFY TYPE AND MOUNTING HEIGHT WITH EQUIPMENT MANUFACTURE)		
	COUNTER TOP DUPLEX OUTLET (CLEAR BACK SPLASH)		
	CEILING MOUNTED OUTLET		
	MOTOR STARTER - PROVIDED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.		
	FLOOR BOX, POWER (COORDINATE FINAL LOCATION WITH OWNER/ARCHITECT PRIOR TO INSTALLATION) MINIMUM 2-3/4" CONDUITS TO ACCESSIBLE CEILING.		
	FLOOR BOX, COMBINATION POWER/COMMUNICATIONS (COORDINATE FINAL LOCATION WITH OWNER/ARCHITECT PRIOR TO INSTALLATION. 2-1" CONDUITS IN SLAB TO 6" ABOVE ACCESSIBLE CEILING - PROVIDE BLANK PLATE OR XX DENOTES CABLE TYPE AND QUANTITY; P=PHONE, D=DATA, C=COAX REFER TO SPECIFICATIONS		
	JUNCTION BOX		
	CONTROL POWER FOR ENERGY MANAGEMENT SYSTEM - PROVIDE OUTLET OR JUNCTION BOX AT LOCATION PER EMS CONTRACTOR		
	HAND DRYER - COORDINATE OUTLET/DEVICE TYPE WITH SUPPLIER. COORDINATE LOCATION WITH THE OWNER/ARCHITECT PRIOR TO ROUGH-IN.		
	ELECTRICAL MOTOR (COORDINATE TERMINATION WITH SUPPLIER)		
	FUSED DISCONNECT SWITCH - FUSE AT MANUFACTURE RECOMMENDED RATING UNLESS NOTED OTHERWISE. XX DENOTES DISCONNECT SIZE, Y DENOTES PHASE, ZZ F DENOTES FUSE SIZE.		
	ELECTRICAL PANEL SURFACE MOUNTED		
	ELECTRICAL PANEL FLUSH MOUNTED		
	TELEPHONE/POWER POLE: COORDINATE EXACT MOUNTING LOCATION WITH FURNITURE MANUFACTURE. MAKE FINAL CONNECTIONS. REFER TO DETAIL. WIRE MOLD: 30TP-4V		
	CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING		
	CONDUIT RUN CONCEALED UNDER FLOOR OR BELOW GRADE		
	HOMERUN TO ELECTRIC PANEL BOARD (INDICATED NUMBER OF CIRCUIT BY NUMBER OF ARROWS)		
	THREE (3) CONDUCTORS RUN IN CONDUIT. EVERY CIRCUIT TO HAVE A GROUND, SHARED NEUTRAL IS NOT ALLOWED.		
	FOUR (4) CONDUCTORS RUN IN CONDUIT. EVERY CIRCUIT TO HAVE A GROUND, SHARED NEUTRAL IS NOT ALLOWED.		
	FIVE (5) CONDUCTORS RUN IN CONDUIT. EVERY CIRCUIT TO HAVE A GROUND, SHARED NEUTRAL IS NOT ALLOWED.		
	FOUR (4) CONDUCTORS RUN IN CONDUIT, ONE CONDUCTOR DESIGNATED FOR ISOLATED GROUND		
	MOTORIZED DAMPER - PROVIDE BY OTHERS. ELECTRICALLY POWERED BY ELECTRICAL CONTRACTOR WHEN NOTED.		
	START - STOP STATION - COORDINATE WITH EQUIPMENT PROVIDER.		
	VARIABLE FREQUENCY DRIVE PROVIDED BY MECHANICAL AND INSTALLED BY ELECTRICAL. MAINTAIN CLEARANCES PER NFPA 70		
	INTERCOM DESCRIPTION		
	CLOCK, D=DENOTES DOUBLE FACE, S=DENOTES SINGLE FACE - DEEP 4" SQUARE BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 3/4" CONDUIT TO ACCESSIBLE CEILING		
	ADMINISTRATIVE PHONE - PHONE FOR SPACE PER SPECIFICATIONS		
	NON-ADMINISTRATIVE PHONE - PHONE FOR SPACE PER SPECIFICATIONS		
	CLASSROOM PHONE - PROVIDE PHONE FOR SPACE PER SPECIFICATIONS		
	CEILING MOUNTED SPEAKER - PROVIDE SPEAKER BACK BOX AND CABLING		
	INTERCOM CONTROL STATION - DEEP 4" SQUARE BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 3/4" CONDUIT TO ACCESSIBLE CEILING.		
	TRUMPET SPEAKER - DEEP 4" SQUARE BOX WITH SINGLE GANG PLASTER RING WITH CABLE/PULLSTRING IN 3/4" CONDUIT TO ACCESSIBLE CEILING. VERIFY HEIGHT WITH ENGINEER.		

ELECTRICAL GENERAL NOTES

1. ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS ANY LOCAL CODES AND ORDINANCES.
2. MAINTAIN PROPER WORKING SPACE CLEARANCES ABOUT ELECTRICAL EQUIPMENT PER NEC ARTICLE 110.26.
3. FULLY COORDINATE ALL ELECTRICAL REQUIREMENTS OF EQUIPMENT BEING PROVIDED UNDER THIS CONSTRUCTION CONTRACT. EACH SYSTEM SHALL BE COMPLETE AND FULLY FUNCTIONAL. THIS INCLUDES MECHANICAL, PLUMBING, OWNER PROVIDED AND CONTRACTOR PROVIDED EQUIPMENT. CONTRACTOR TO REFER TO EQUIPMENT MANUFACTURER'S DOCUMENTS AND SHOP DRAWINGS PRIOR TO ANY TROUGH-IN.
4. CONTRACTOR SHALL COORDINATE CIRCUIT BREAKER AND FUSE SIZES FOR MECHANICAL EQUIPMENT PER SUBMITTED EQUIPMENT MANUFACTURER'S RECOMMENDED NAMEPLATE RATINGS PRIOR TO SHOP DRAWING PHASE OF PROJECT.
5. INTERRUPTION OF SERVICE: BEFORE ANY EQUIPMENT IS SHUT DOWN FOR DISCONNECTING OR TIE-INS, ARRANGEMENTS SHALL BE MADE WITH THE ARCHITECT AND THIS WORK SHALL BE DONE AT THE TIME BEST SUITED TO THE OWNER. OUTAGES MUST BE SCHEDULED THROUGH THE ARCHITECT. THE ARCHITECT SHALL REVIEW EXTENT, LENGTH, AND TIMING OF OUTAGES. SERVICES SHALL BE RESTORED THE SAME DAY. PROVIDE TEMPORARY POWER OR OTHER SERVICES AS REQUIRED DURING OUTAGES. ALL OVERTIME OR PREMIUM COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE BASE BID.
6. COORDINATE LOCATION OF ELECTRICAL EQUIPMENT WITH PIPES AND DUCT WORK BEING SUPPLIED BY OTHER DIVISIONS. THE EQUIPMENT SPACE INCLUDED ALL REFERENCED NEC CLEARANCES SHALL BE MAINTAINED. IF ANY PIPES OR DUCT WORK VIOLATE ANY ELECTRICAL CLEARANCE REQUIREMENTS, IT SHALL BE REMOVED AND RELOCATED AT THE CONTRACTOR'S EXPENSE. DRIP PANS ARE NOT PERMITTED UNLESS SPECIFICALLY CALLED FOR IN THE CONSTRUCTION DOCUMENTS.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL EQUIPMENT THAT MAY REQUIRE MAINTENANCE AND OPERATION ARE READILY ACCESSIBLE. REGARDLESS OF THE DIAGRAMMATIC LOCATION SHOWN ON THE DRAWINGS, ALL CONNECTIONS TO FIXTURES AND EQUIPMENT SHOWN ON THE DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC UNLESS OTHERWISE INDICATED BY A SPECIFIC DETAIL ON THE DRAWINGS. THE ACTUAL CONNECTIONS SHALL BE MADE TO FULLY SUIT THE REQUIREMENTS OF EACH CASE AND ADEQUATELY PROVIDE FOR SERVING.
8. CONTRACTOR SHALL TAMP AND BACKFILL ALL TRENCHES. TRENCHES SHALL BE LEVEL WITH FINISH GRADE.
9. CONTRACTOR SHALL VISIT THE SITE AND DETERMINE THE EXTENT OF DEMOLITION WORK AND NEW WORK NEEDED FOR THIS PROJECT.
10. CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT SCOPE, CONSTRAINTS, UTILITY CONNECTIONS AND BUILDING SERVICES.
11. CONTRACTOR SHALL GIVE FIRST RIGHT TO REFUSAL OF SALVAGE TO THE OWNER. IF THE OWNER ELECTS TO NOT PURCHASE SALVAGE, CONTRACTOR SHALL REMOVE SALVAGE BY LAWFUL MEANS.
12. DRAWINGS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE. DRAWINGS SHALL NOT BE SCALED. COORDINATE THE WORK WITH THE EXISTING SITE CONDITIONS AND WITH WORK OF OTHER TRADES.
13. FIELD VERIFY DIMENSIONS PRIOR TO ORDERING, FABRICATING, AND ERECTION OF MATERIAL AND/OR EQUIPMENT. NOTIFY THE ENGINEER OF DISCREPANCIES IN A TIMELY MANNER.
14. SEAL PENETRATIONS THROUGH THE BUILDING ENVELOPE.
15. PENETRATIONS THROUGH RATED WALLS, FLOORS, PARTITIONS AND ASSEMBLIES SHALL BE INSTALLED AND FIREFASTED TO MEET UL FIRE RESISTANCE LISTING AND NFPA REQUIREMENTS FOR THE PENETRATION.
16. COORDINATE DEVICES REQUIRING ACCESS PANELS WITH THE ARCHITECT AND OTHER TRADES.
17. DEVICE SYMBOLS ALONG WITH DRAWINGS, DRAWING NOTES, AND SPECIFICATIONS ARE INTENDED TO PROVIDE A COMPLETE SYSTEM. CONTRACTOR TO COORDINATE WITH ALL TRADES TO PROVIDE A COMPLETE SYSTEM.



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DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE: _____	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: <u>05/16/2022</u>	
REVISION:	
DATE: _____	
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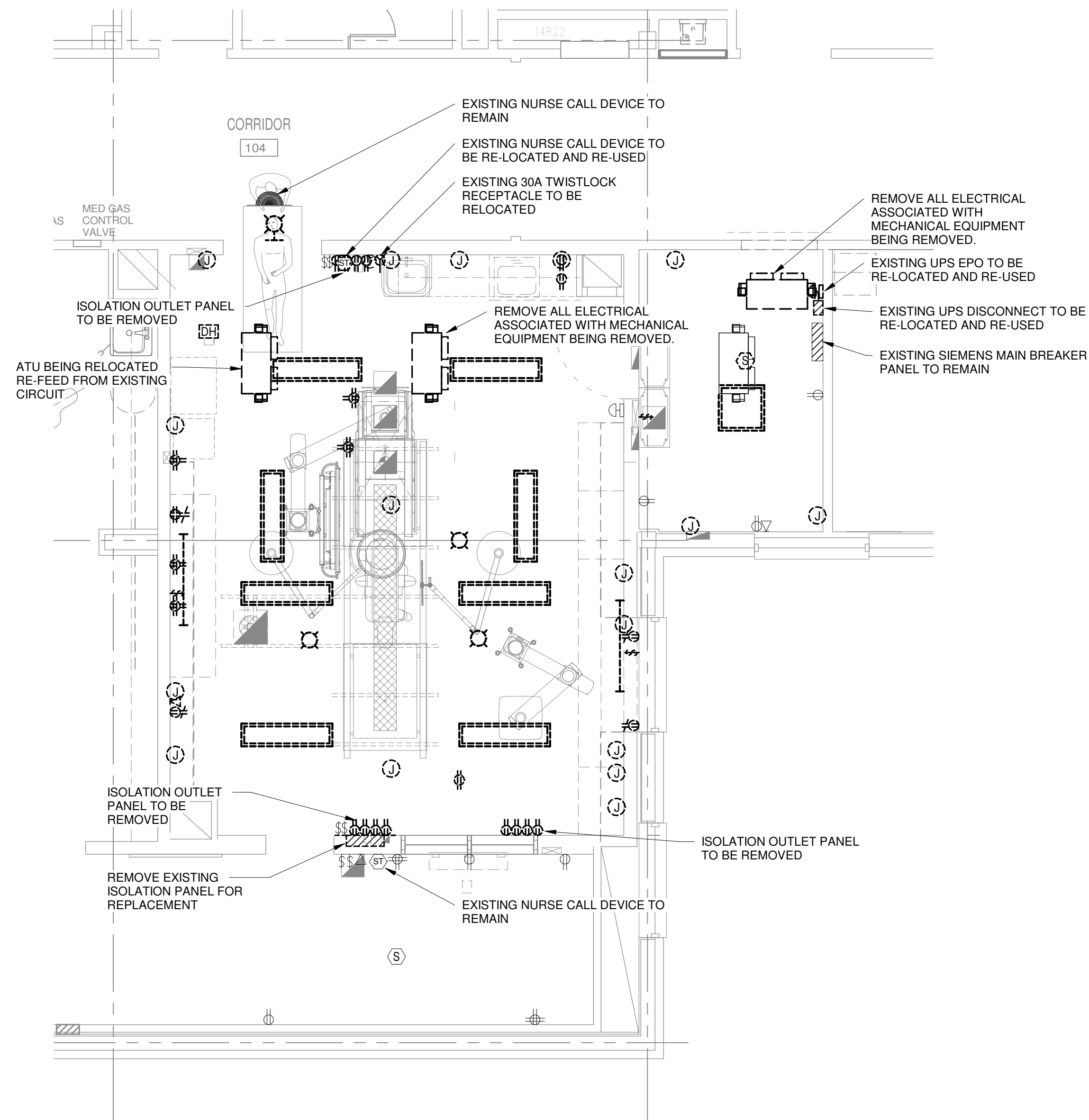
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ELECTRICAL LEGEND & NOTES

SHEET NUMBER

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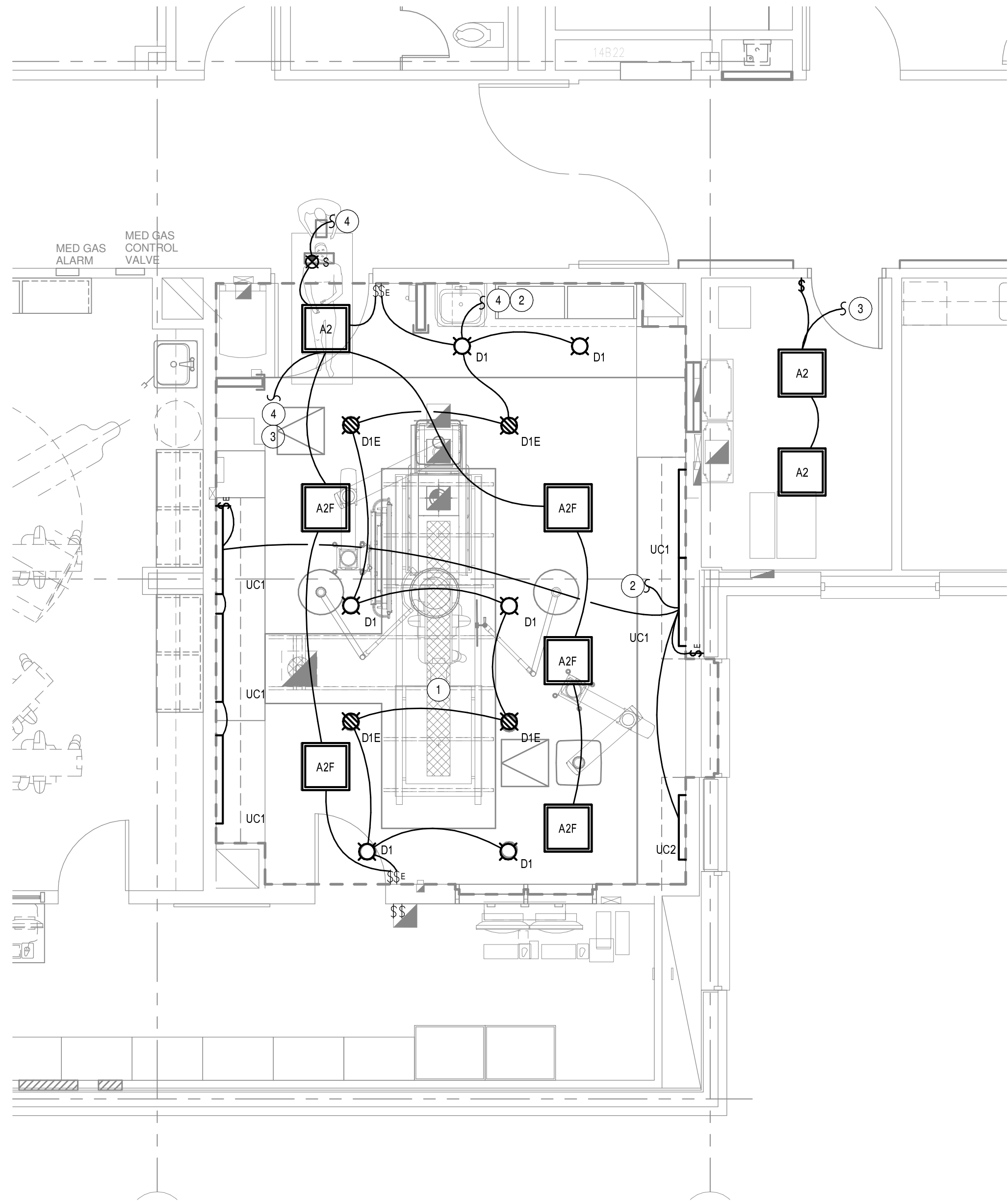
20132
PROJECT NUMBER



1 Electrical Demolition Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

GENERAL ELECTRICAL DEMOLITION NOTES:

1. THE CONTRACTOR IS ALLOWED TO RE-USE EXISTING DEVICES, DISCONNECTS, & PANELS IF THE EQUIPMENT IS IN GOOD WORKING CONDITION. THE CONTRACTOR SHALL CLEAN & REPAIR THE EXISTING DEVICES AS NEEDED IF THE CONTRACTOR CHOOSES TO RE-USE.
2. REMOVE EXISTING LIGHT FIXTURES, DISCONNECTS, OUTLETS, BOXES, WIRING, CONDUIT, ETC. AND OFFER TO OWNER. IF OWNER REFUSES, ELECTRICAL CONTRACTOR SHALL REMOVE FROM SITE AND PROPERLY AND LEGALLY DISPOSE.
3. REMOVE EXISTING DEVICES FROM WALLS BEING DEMOLISHED. IF THEY OCCUR IN THE MIDDLE OF A CIRCUIT, MAKE THE REMAINDER OF THE CIRCUIT CONTINUOUS.
4. RELOCATE EXISTING DEVICE AND EXTEND EXISTING CIRCUITRY.
5. MAINTAIN ALL REMAINING EXISTING CIRCUITS WHERE INTERRUPTED BY DEMOLITION WORK. PROVIDE WIRING AND CONDUIT TO RESTORE CONTINUOUS CIRCUIT INTEGRITY.
6. PROTECT EXISTING ELECTRICAL EQUIPMENT AND INSTALLATIONS INDICATED TO REMAIN. IF DAMAGED OR DISTURBED IN THE COURSE OF THE WORK, REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY, QUALITY, AND FUNCTIONALITY.



2 Lighting Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

LIGHTING FIXTURE SCHEDULE

TYPE MARK	DESCRIPTION	LAMP		VOLTS	MANUFACTURER	MODEL	COMMENTS
		No.	TYPE				
A2	2'x2' LED LAY-IN SEALED FLAT PANEL	-	LED	120	FAIL-SAFE	FSP-22-32-50-CP187	
A2F	2'x2' LED LAY-IN SEALED GASKETED FLAT PANEL	-	LED	120	FAIL-SAFE	FSP-22-32-50-CP187-DFCL-2424W	
D1	LED SEALED DOWN LIGHT	-	LED	120	FAIL-SAFE	FLD6BX-30-D010-FEU6B-1/2-90-50-F6LB-M-1-H	
D1E	LED SEALED DOWN LIGHT W/ BACKUP BATTERY	-	LED	120	FAIL-SAFE	FLD6BX-30-D010-1EM14-FEU6B-1/2-90-50-F6LB-M-1-H	
S	SINGLE FACE "IN USE" SIGN	-	LED	120	SURE-LITES	SLX-6-S-R-"ROOM IN USE"	
UC1	4' LED UNDER CABINET LIGHT	-	LED	120	FAIL-SAFE	UCL-4-LD4-50-89AM-ED01-UNV	
UC2	3' LED UNDER CABINET LIGHT	-	LED	120	FAIL-SAFE	UCL-3-LD4-50-89AM-ED01-UNV	

LIGHTING NOTES:

- 1 THIS SPACE IS CLASSIFIED AS A PATIENT CARE AREA PER THE NEC. BRANCH CIRCUITS SHALL BE INSTALLED PER NEC 517.13 ALL BRANCH CIRCUITS IN THIS SPACE SHALL BE INSTALLED IN EMT, RIGID METAL OR IMC WITH AN ADDITIONAL GROUND. THE CONDUIT SHALL ITSELF SERVE AS AN EQUIPMENT GROUNDING RETURN PATH.
- 2 TIE TO EXISTING CRITICAL BRANCH LIGHTING CIRCUIT IN THIS AREA.
- 3 TIE TO EXISTING NORMAL POWER LIGHTING CIRCUIT IN THIS AREA.
- 4 CONTROL BY SIEMENS EQUIPMENT VIA RELAY. REFER TO DETAILS IN SIEMENS DRAWINGS.

1304 BERTRAND DRIVE SUITE F7
LAFAYETTE, LOUISIANA 70506
(337) 234-7474 * FAX (337) 234-7774

Electrical Contact: David Carroll, P.E.
david@meconsulting.com

PROJECT No.: 21197.00

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

2830 CALDER AVENUE

ISSUED FOR SCHEMATIC DESIGN ☐

DATE:

DESIGN DEVELOPMENT ☐

DATE:

BIDS & CONSTRUCTION ☒

DATE: 05/16/2022

REVISION:

DATE:

REVISION:

DATE:

REVISION:

DATE:

DRAWINGS SHEET TITLE

ELEC. DEMO & LIGHTING PLANS

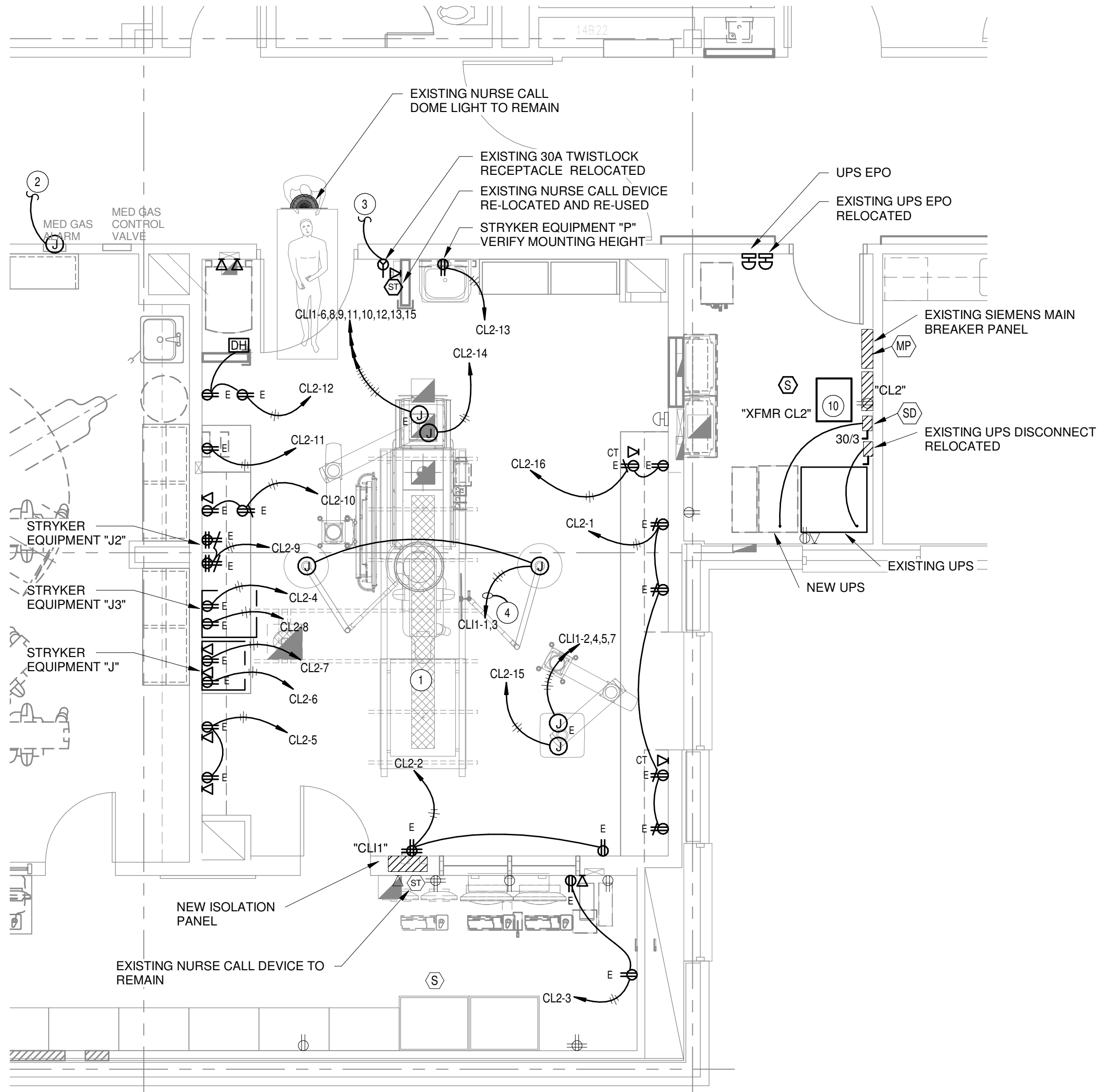
SHEET NUMBER

E2.1

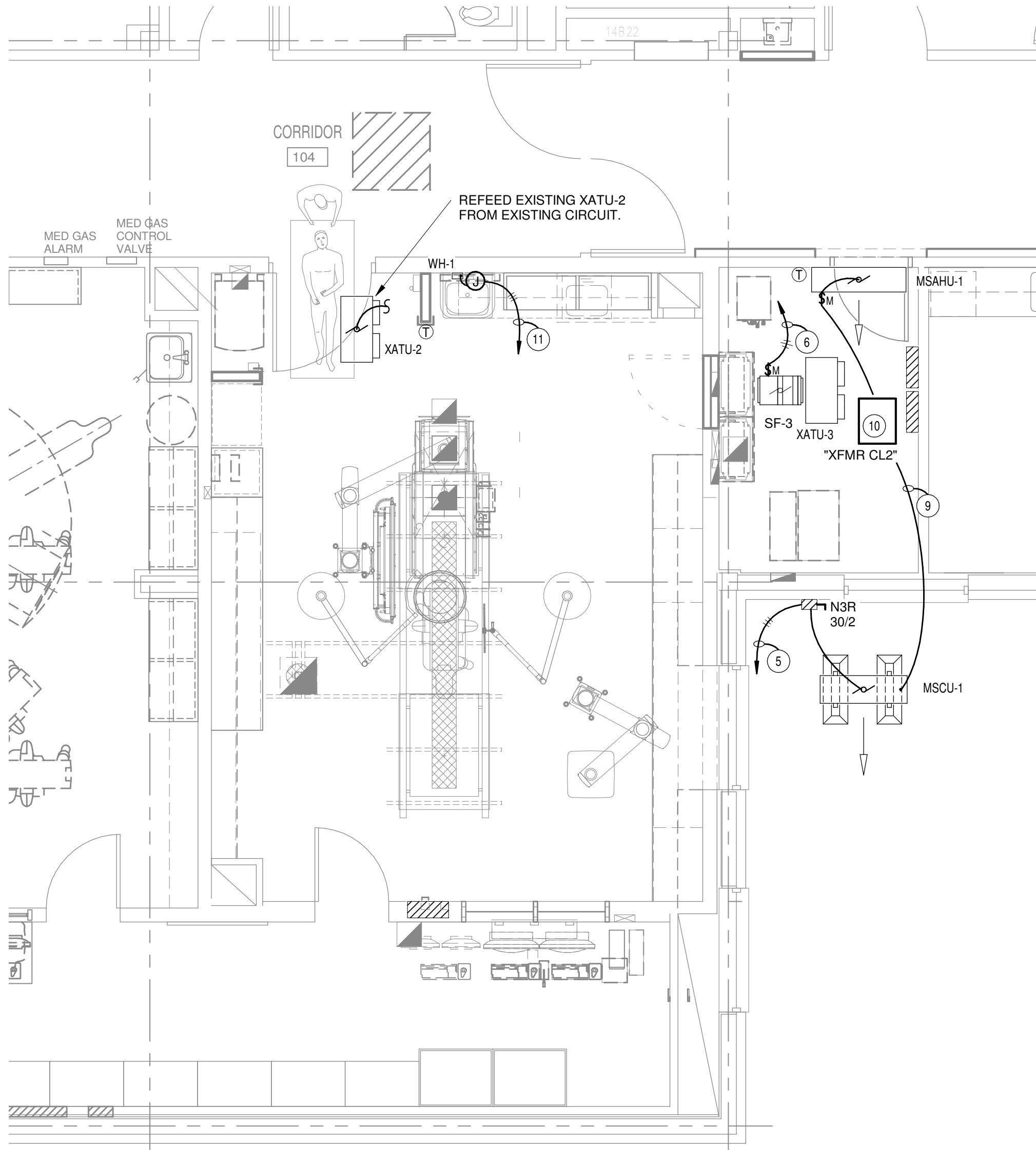
20132

PROJECT NUMBER

REFER TO SIEMENS AND STRYKER ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND ELECTRICAL REQUIREMENTS.



① Power & Special Systems Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions



② Mechanical Power Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

GENERAL ELECTRICAL NOTES:

1. ISOLATED POWER SYSTEMS CONDUCTORS TYPE AND COLOR PER NFPA AND MANUFACTURER'S REQUIREMENTS.

ELECTRICAL NOTES:

- THIS SPACE IS CLASSIFIED AS A PATIENT CARE AREA PER THE NEC. BRANCH CIRCUITS SHALL BE INSTALLED PER NEC 517.13 ALL BRANCH CIRCUITS IN THIS SPACE SHALL BE INSTALLED IN EMT, RIGID METAL OR IMC WITH AN ADDITIONAL GROUND. THE CONDUIT SHALL ITSELF SERVE AS AN EQUIPMENT GROUNDING RETURN PATH. PROVIDE HOSPITAL GRADE RECEPTACLES IN THIS SPACE.
- TIE TO EXISTING MED GAS ALARM CIRCUIT IN THIS AREA.
- TIE TO EXISTING 30A TWISTLOCK CIRCUIT FOR LASER IN THIS AREA.
- CIRCUIT THROUGH STRYKER SK ENCLOSURE, VERIFY SK ENCLOSURE LOCATION.
- 3/4" CONDUIT WITH 3#10 TO 30/2 BREAKER IN EXISTING PANEL "EPP". PROVIDE CIRCUIT BREAKER.
- 3/4" CONDUIT WITH 3#12 TO 20/1 BREAKER IN EXISTING PANEL "EPP". PROVIDE CIRCUIT BREAKER.
- 1/2" CONDUIT WITH 3#12 TO 20/1 BREAKER IN EITHER NORMAL BRANCH POWER PANEL "CO" OR "CR". PROVIDE CIRCUIT BREAKER.
- TIE TO EXISTING EMERGENCY RECEPTACLE CIRCUIT IN THIS AREA.
- 3/4" CONDUIT WITH CABLE PER MANUFACTURER.
- SUSPEND FOR STRUCTURE ABOVE ACCESSIBLE CEILING. FINAL MOUNTING LOCATION TO BE VERIFIED IN FIELD.
- 3/4" CONDUIT WITH 2#8, 1#10 TO 40/2 BREAKER IN EITHER NORMAL BRANCH PANEL "CO" OR "CR". PROVIDE CIRCUIT BREAKER. PROVIDE PERMANENT PAD-LOCKABLE DEVICE ON CIRCUIT BREAKER FOR THE PURPOSE OF LOCKING OUT DURING MAINTENANCE ON EQUIPMENT BEING SERVED.



CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

2830 CALDER AVENUE

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 05/16/2022	
REVISION:	
DATE:	
REVISION:	
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REVISION:	
DATE:	

DRAWINGS SHEET TITLE

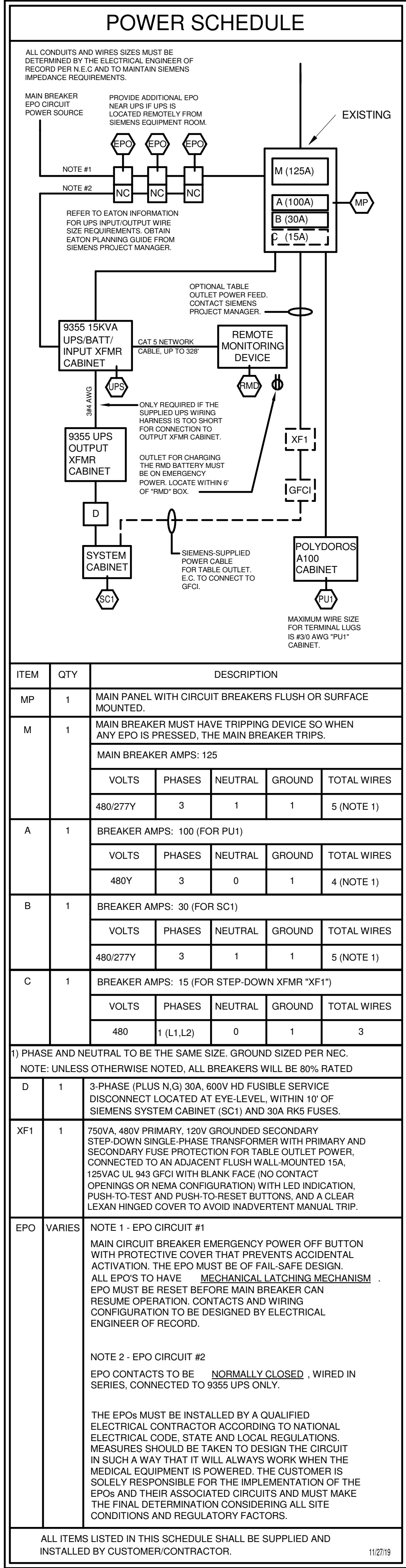
POWER & SPECIAL SYSTEMS PLAN

SHEET NUMBER

E3.1

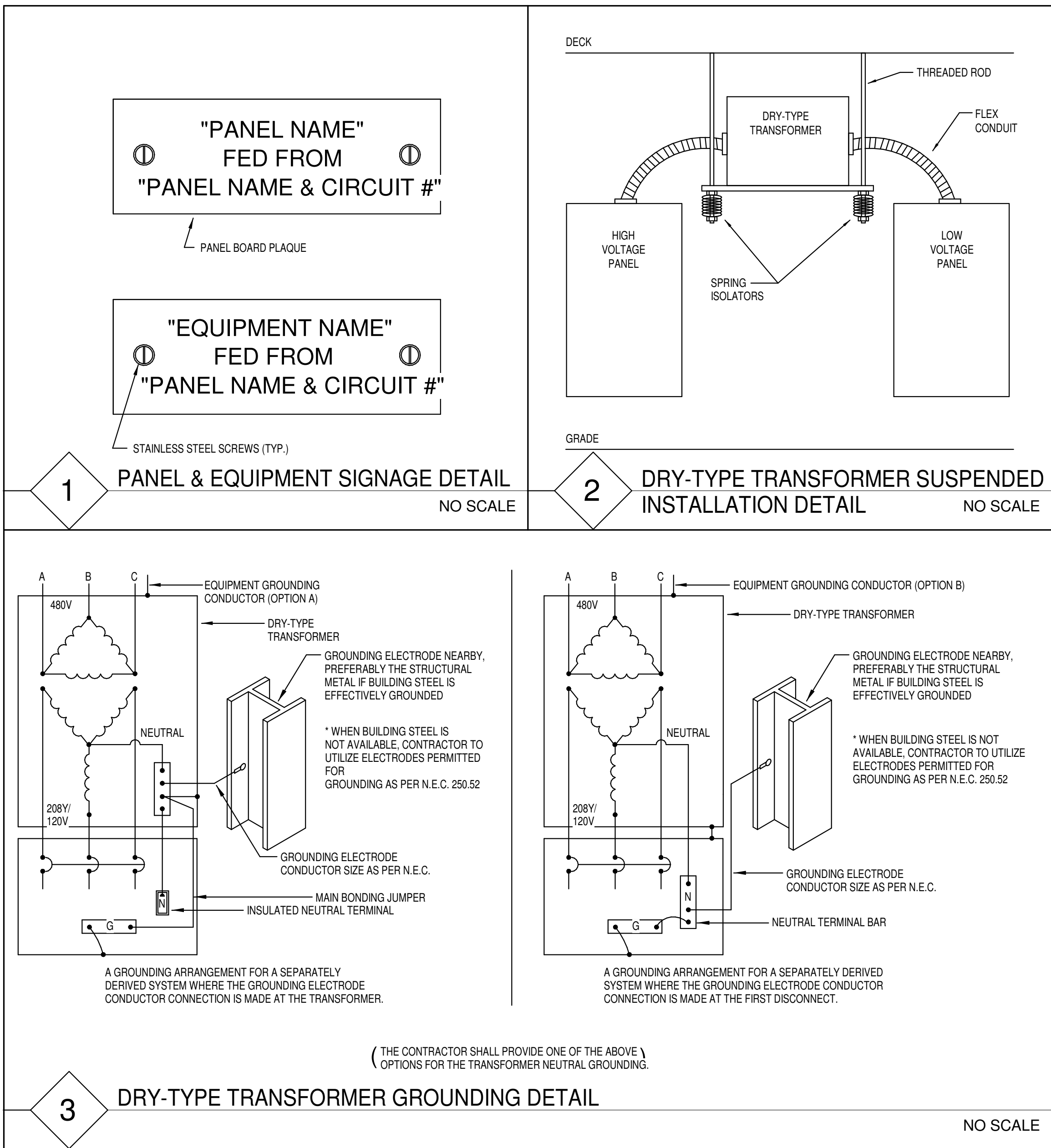
20132

PROJECT NUMBER



ARTIS SINGLE PLANE, 9355 15KVA UPS

CONTRACTOR SUPPLIED CABLES				
FROM	VIA	TO	DESCRIPTION	REMARKS
PANEL	1	MP	EXISTING	SEE "POWER SCHEDULE"
MP	2	PU1	3#2, 1#2 GROUND AND CONNECT	SEE "POWER SCHEDULE"
MP	3	UPS	4#10, 1#10 GROUND	SEE "POWER SCHEDULE"
SD	4	SD	4#10, 1#10 GROUND	SEE "POWER SCHEDULE"
UPS	5	SC1	4#10, 1#10 GROUND	SEE "POWER SCHEDULE"
UPS	6	XFMR	4#10, 1#10 GROUND	SEE "POWER SCHEDULE"
UPS	7	EPO	2#12	SEE "POWER SCHEDULE"
RMD	8	UPS	CAT 5 NETWORK CABLE, UP TO 328'	SEE "POWER SCHEDULE"
MP	9	EPO	2#12	SEE "POWER SCHEDULE"
EPO	10	EPO	4#12, PLUS GROUND	SEE "POWER SCHEDULE"
SC1	11	WL	2#14-18 AWG	SEE "LIGHTING DETAIL" SHEET E-501
SC1	12	DS	24V SIGNAL, 2#14-18 AWG	DOOR SWITCH
MP	13	XF1	3#12, 1#12 GROUND (OPTIONAL TABLE POWER OUTLET)	SEE "POWER SCHEDULE"



ELECTRICAL LEGEND			
SYM	SIZE	DESCRIPTION SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR	REMARKS
AS	AS REQUIRED	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. PROVIDE 4" CONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR. PROVIDE STAINLESS STEEL WATERPROOF PLATE ON TOP OF CORED OPENING IN FLOOR.	TABLE ACCESSORIES
AS	18" X 8"	BUSHED OPENING IN VERTICAL DUCT "VD1" COVER AT FLOOR LINE.	CABLE CABINET
AS	3"	BUSHED OPENING IN TOP OF HORIZONTAL DUCT "HD1".	CONTROL ROOM DISTRIBUTOR
AS	AS REQUIRED	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. FOR A SINGLE CONDUIT CONNECTION TO THIS BOX, PROVIDE A 3" CONDUIT THRU FLOOR. FOR MULTIPLE CONDUIT CONNECTIONS, PROVIDE (2) 4" CONDUITS THRU FLOOR. E.G. TO DESIGN TRANSITION TO SURFACE FLOOR DUCT AS REQUIRED.	CONTROL ROOM UNDER-FLOOR BOX
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT 2 INCHES ABOVE SHELF HEIGHT. PROVIDE BOX WITH REMOVABLE FRONT COVER AND (1) 4" BUSHING IN CENTER OF REMOVABLE COVER FOR CABLE EXIT. SEE PLAN FOR LOCATION.	COOLING UNIT
AS	AS REQUIRED	PULL BOX MOUNTED ABOVE FINISHED CEILING WITH REMOVABLE BOTTOM COVER WITH 3" BUSHED OPENING. NOTE: IF LOCAL CODES REQUIRE COMPLETE CABLE CONTAINMENT IN RACEWAY, THIS BOX MUST BE SIZED SUCH THAT A 8" X 6" X 3" SIEMENS POWER DISTRIBUTION BOX CAN BE INSTALLED INSIDE THIS PULL BOX.	ROOM DVI 2x6WD-19D (live+ref)
---	---	EMERGENCY OFF BUTTONS FOR CIRCUIT BREAKERS. EPO'S MUST PREVENT RESETTING OF CIRCUIT BREAKERS WHEN IN OFF POSITION. EPO'S MUST BE RECESSED OR SHIELDED. FINAL LOCATION DETERMINED BY CUSTOMER.	EMERGENCY POWER OFF
---	---	FIXPOINT DESIGNATION. SAME PULL BOX / OPENING AS "D1".	INTERCOM COMFORT MIC
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT A RECOMMENDED HEIGHT OF 6' AFF.	INTERCOM COMFORT SPEAKER
AS	4" CONDUIT	BUSHED OPENING IN HORIZONTAL DUCT "HD2" COVER IN SHOWN LOCATION.	IMAGE SYSTEM
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED FLOOR WITH REMOVABLE TOP COVER WITH 4" BUSHED OPENING.	IMAGE SYSTEM
AS	3" CONDUIT	BUSHED OPENING IN VERTICAL DUCT "VD5" AT HEIGHT COORDINATED WITH THE INSTALLATION OF THE INJECTOR WALL CONNECTION BOX.	INJECTOR WALL OUTLET
---	---	MAIN PANEL WITH MAIN BREAKER. LOCATION DETERMINED BY CUSTOMER/CONTRACTOR. SEE "POWER SCHEDULE"	BREAKER PANEL
AS	AS REQUIRED	PULL BOX MOUNTED ABOVE FINISHED CEILING. PROVIDE REMOVABLE BOTTOM COVER WITH 8" BUSHED OPENING. PROVIDE CORRESPONDING OPENING AT CEILING LINE.	C-ARM
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE. PROVIDE BOX WITH REMOVABLE FRONT COVER WITH 4" BUSHED OPENING AT BOTTOM OF COVER.	GENERATOR
AS	AS REQUIRED	SINGLE-GANG RJ45 JACK	UPS REMOTE DISPLAY
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE. PROVIDE BOX WITH REMOVABLE FRONT COVER WITH 4" BUSHED OPENING AT BOTTOM OF COVER.	SYSTEM CABINET
AS	AS REQUIRED	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. PROVIDE 6" CONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR LINE.	SYSTEM CABINET
30A	3-PHASE (PLUS N.G.) 30A, 600V HD FUSIBLE SERVICE DISCONNECT LOCATED AT EYE-LEVEL, WITHIN 10' OF SIEMENS SYSTEM CABINET (SC1) AND 30A RK5 FUSES. SEE POWER SCHEDULE.		UPS SERVICE DISCONNECT
AS	AS REQUIRED	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. PROVIDE 4" CONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR LINE.	TABLE
AS	AS REQUIRED	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE. PROVIDE BOX WITH REMOVABLE FRONT COVER WITH 4" BUSHED OPENING.	15KVA UPS
750VA	STEP-DOWN TRANSFORMER. SEE POWER SCHEDULE.		XFMR FOR TABLE OUTLET
2" CONDUIT	BUSHED OPENING IN HORIZONTAL DUCT "HD1" COVER IN SHOWN LOCATION.		XWP LD INPUT
3 1/2" X 10"	HORIZONTAL DUCT MOUNTED ON FINISHED WALL AT FLOOR LINE. PROVIDE DUCT WITH REMOVABLE FRONT COVER. CONNECT TO "VD3" AS SHOWN.		HORIZONTAL WALL DUCT
3 1/2" X 18"	VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL. BEGIN DUCT AT FLOOR LINE AND EXTEND UP WALL ABOVE FINISHED CEILING. PROVIDE JUNCTION BOX (SIZED BY E.C.) AT TOP OF DUCT FOR CONDUIT TRANSITIONS.		VERTICAL DUCT
3 1/2" X 10"	VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL. BEGIN DUCT AT FLOOR LINE AND EXTEND UP WALL ABOVE FINISHED CEILING. PROVIDE JUNCTION BOX (SIZED BY E.C.) AT TOP OF DUCT FOR CONDUIT TRANSITIONS.		VERTICAL DUCT
3 1/2" X 6"	VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL. BEGIN DUCT AT FLOOR LINE AND EXTEND UP WALL ABOVE FINISHED CEILING. PROVIDE JUNCTION BOX (SIZED BY E.C.) AT TOP OF DUCT FOR CONDUIT TRANSITIONS.		VERTICAL DUCT
EXISTING	CONDUIT FROM PANEL TO "MP"		SEE "POWER SCHEDULE"
1 1/2"	CONDUIT FROM "MP" TO "PU1"		SEE "POWER SCHEDULE"
1"	CONDUIT FROM "MP" TO "UPS" WITH FLEX CONDUIT FROM UPS BOX TO UPS CABINET.		SEE "POWER SCHEDULE"
1"	CONDUIT FROM "UPS" TO "SD" WITH FLEX CONDUIT FROM UPS BOX TO OUTPUT XFMR CABINET.		SEE "POWER SCHEDULE"
1"	CONDUIT FROM "SD" TO "SC1"		SEE "POWER SCHEDULE"
1"	FLEX CONDUIT FROM UPS CABINET TO OUTPUT TRANSFORMER CABINET		SEE "POWER SCHEDULE"
3/4"	CONDUIT FROM "UPS" TO "EPO" WITH FLEX CONDUIT FROM UPS BOX TO UPS CABINET.		SEE "POWER SCHEDULE"
3/4"	CONDUIT FROM "RMD" TO "UPS"		SEE "POWER SCHEDULE"
3/4"	CONDUIT FROM "MP" TO "EPO"		SEE "POWER SCHEDULE"
3/4"	CONDUIT FROM "SC1" TO "WL"		
3/4"	CONDUIT FROM "SC1" TO "DS"		
3/4"	CONDUIT FROM "MP" TO "XF1" (OPTIONAL)		TABLE POWER OUTLET
2"	CONDUIT FROM "P1" TO "VD1" (PU1)		MAX. CONDUIT LENGTH 25'
(2) 3"	CONDUITS FROM "P1" TO "VD1" (PU1)		MAX. CONDUIT LENGTH 25'
3"	CONDUIT FROM "P1" TO "VD1" (SC1)		MAX. CONDUIT LENGTH 25'
2 1/2"	CONDUIT FROM "P1" TO "CU1" FOR LIQUID COOLING HOSES		MAX. CONDUIT LENGTH 75'
(2) 3"	CONDUITS FROM "VD1" (SC1) TO "VD3" ("CR1")		MAX. CONDUIT LENGTH 35'
3"	CONDUIT FROM "SC" (SC1) TO "T1" UNDER FLOOR		MAX. CONDUIT LENGTH 33'
2"	CONDUIT FROM "VD1" (SC1) TO "CU1"		MAX. CONDUIT LENGTH 80'
1"	CONDUIT FROM "VD1" (SC1) TO "D1"		MAX. CONDUIT LENGTH 80'
2 1/2"	CONDUIT FROM "VD1" (SC1) TO "D1"		MAX. CONDUIT LENGTH 44'
2"	CONDUIT FROM "VD2" (IS) TO "D1"		MAX. CONDUIT LENGTH 63'
1"	CONDUIT FROM "VD3" (XWP) TO "D1"		MAX. CONDUIT LENGTH 62'
3"	CONDUIT FROM "IS2" ("IS") TO "CRB" ("CR1") UNDER FLOOR		MAX. CONDUIT LENGTH 48'
2"	CONDUIT FROM "IS2" ("IS") TO "CRB" ("CR1") UNDER FLOOR		MAX. CONDUIT LENGTH 48'
3"	CONDUIT FROM "CRB" TO "T1" UNDER FLOOR (VOLCANO S5 CABLE SET FOR PHILIPS INTRASIGHT)		MAX. CONDUIT LENGTH 75'
3"	CONDUIT FROM "VD1" (SC1) TO "VD4" ("TW") (INJECTOR WALL CONNECTION)		MAX. CONDUIT LENGTH 38'
3/4"	CONDUIT FROM "VD3" (CR1) TO "IC" (INTERCOM)		MAX. CONDUIT LENGTH 66'
3/4"	CONDUIT FROM "VD3" (CR1) TO "IC2" (INTERCOM)		MAX. CONDUIT LENGTH 60'
3"	CONDUIT FROM "T1" TO "B10" UNDER FLOOR		
3"	CONDUIT FROM "CRB" TO "B10" UNDER FLOOR (CUSTOMER PATIENT MONITORING)		
1/2"	CONDUIT FROM "XF1" TO "SC1" (THEN "SC" AND ROUTE THROUGH CONDUIT #19 TO "T1") (OPTIONAL TABLE POWER OUTLET)		MAX. CONDUIT LENGTH 64'
2"	CONDUIT FROM "VD2" (IS) TO "CUSTOMER MONITOR" (LIVE-REF VIDEO TO OEM OPTION)		MAX. CONDUIT LENGTH 98'
3"	CONDUIT FROM "SC" (SC1) TO "IS2" ("IS") UNDER FLOOR		MAX. CONDUIT LENGTH 56'

* SEE SIEMENS ELECTRICAL SHEET E-101 FOR REFERENCE.

1304 BERTRAND DRIVE SUITE F7
LAFAYETTE, LOUISIANA 70506
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Electrical Contact: David Carroll, P.E.
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PROJECT No.: 21197.00

CONSULTING

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

ISSUED FOR SCHEMATIC DESIGN ☐

DATE: _____

DESIGN DEVELOPMENT ☐

DATE: _____

BIDS & CONSTRUCTION ☒

DATE: 05/16/2022

REVISION: _____

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DATE: _____

DRAWINGS SHEET TITLE

ELECTRICAL SCHEDULES AND DETAILS

SHEET NUMBER

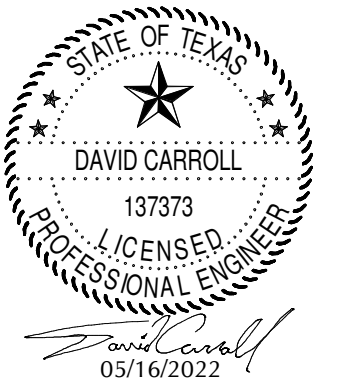
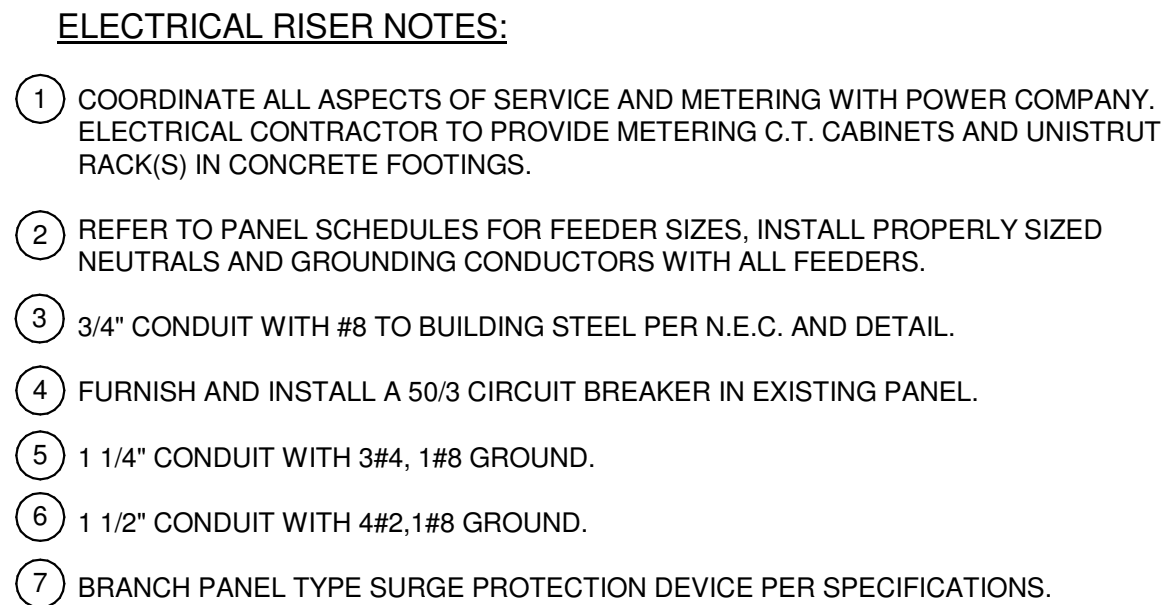
E4.1

20132

PROJECT NUMBER

Isolation Panel: CLN														
Primary Voltage: 208V/2P Secondary Voltage: 120V/2P KVA: 7.5					Primary Main: 50A/2P Secondary Main: 80A/2P A.I.C.(MIN): A.I.C.(PRI): 12,000									
CKT	Circuit Description	Rating/Pole	A		B		C		Rating/Pole	Circuit Description	CKT			
1	Stryker Surgical Lights	20 A / 2	500...	250...					20 A / 2	Stryker Boom "E"	2			
3	--	--					500...	250...	--	--	4			
5	Stryker Boom "E"	20 A / 2	250...	250...					20 A / 2	Stryker Boom "D"	6			
7	--	--					250...	250...	--	--	8			
9	Stryker Boom "D"	20 A / 2	250...	250...					20 A / 2	Stryker Boom "D"	10			
11	--	--					250...	250...	--	--	12			
13	Stryker Boom "D"	20 A / 2	250...	0 VA					20 A / 2	Spare	14			
15	--	--					250...	0 VA	--	--	16			
17											18			
19											20			
21											22			
23											24			
25											26			
27											28			
29											30			
31											32			
Total Load:			2 kVA		0 kVA		2 kVA							
Total Amps:			33 A		0 A		33 A							
Load Classification														
Receptacles			Connected....	Demand Factor		Estimated...		Panel Totals						
			4000 VA	100.00%		4000 VA								

Branch Panel: CL2 Location: Mounting: Surface Enclosure: Type 1										Volts: 120/208 Vye Phases: 3 Wires: 4					A.I.C. Rating: 22,000 Main's Type: MCB Main's Rating: 100 A				
General Schedule Notes:										Verify proper working clearances per N.E.C. prior to installation.									
Notes	#	Circuit Description	Breaker	Wire	C.	A	B	C	C.	Wire	Breaker	Circuit Description	#	Notes					
	1	Rec(East Wall)	20 A/1	3#12	3/4"	720	540			3/4"	3#12	20 A/1	Rec(South Wall)	2					
	3	Receptacles	20 A/1	3#12	3/4"			360	180	3/4"	3#12	20 A/1	Rec(Stryker J3)	4					
	5	Rec(West Wall)	20 A/1	3#12	3/4"				360	180	3/4"	3#12	20 A/1	Rec(Stryker J)	6				
	7	Rec(Stryker J)	20 A/1	3#12	3/4"	180	180			3/4"	3#12	20 A/1	Rec(Stryker J3)	8					
	9	Rec(Stryker J2)	20 A/1	3#12	3/4"			400	360	3/4"	3#12	20 A/1	Rec(West Wall)	10					
	11	Receptacles	20 A/1	3#12	3/4"				180	360	3/4"	3#12	20 A/1	Rec(West Wall)	12				
	13	Rec(Stryker P)	20 A/1	3#12	3/4"	180	500			3/4"	3#12	20 A/1	Stryker Boom D Motor	14					
	15	Stryker Boom E Motor	20 A/1	3#12	3/4"			500	360	3/4"	3#12	20 A/1	Rec(East Wall)	16					
	17	Isolation Panel "CL11"	50 A/2	2#6, 1#10	1"				2000	0	--	20 A/1	Spare	18	--				
--	19	--	--	--	--	2000	0			--	--	20 A/1	Spare	20	--				
--	21	Space	/1	--	--	--	--	0		--	--	20 A/1	Spare	22	--				
--	23	Space	/1	--	--	--	--	--	0	--	--	20 A/1	Spare	24	--				
--	25	Space	/1	--	--	--	0			--	--	20 A/1	Spare	26	--				
--	27	Space	/1	--	--	--	--	0		--	--	20 A/1	Spare	28	--				
--	29	Space	/1	--	--	--	--	--	0	--	--	20 A/1	Spare	30	--				
--	31	Space	/1	--	--	--	--	--	--	--	--	/1	Space	32	--				
--	33	Space	/1	--	--	--	--	--	--	--	--	/1	Space	34	--				
--	35	Space	/1	--	--	--	--	--	--	--	--	/1	Space	36	--				
--	37	SPD	60 A/3	-- (4)	-- (4)	0	--			--	--	/1	Space	38	--				
--	39	--	--	--	--	--	0	--		--	--	/1	Space	40	--				
--	41	--	--	--	--	--	--	0	--	--	--	/1	Space	42	--				
Total Load:						4 kVA	2 kVA	3 kVA											
Total Amps:						37 A	18 A	27 A											
Load Classification			Connected Load		Demand Factor		Estimated Demand		Panel Totals										
Receptacles			9540 VA		100.00%		9540 VA												
									Total Conn. Load: 10 kVA										
									Total Est. Demand: 10 kVA										
									Total Conn.: 26 A										
									Total Est. Demand: 26 A										
Panel Schedule Notes: (Notes below do not necessarily appear in panel schedule)																			
1. VERIFY BREAKER SIZE PER EQUIPMENT MANUFACTURERS' RECOMMENDED NAME PLATE RATING PRIOR TO SHOP DRAWINGS PHASE OF PROJECT.																			
2. CIRCUIT VIA _____ POLE LIGHTING CONTACTOR. CONTROL WITH (2) CIRCUIT INTERMATIC OR EQUAL ASTRONOMICAL TIME CLOCK WITH BATTERY BACKUP.																			
3. PHOTOCELL "ON-TIME CLOCK" OFF.																			
4. PROVIDE GFCI PROTECTED CIRCUIT BREAKER.																			
5. CONDUIT, WIRE, AND BREAKER SIZE PER MANUFACTURER'S REQUIREMENTS....																			



CHRISTUS Hospital St Elizabeth

BEAUMONT, TX 77701

2830 CALDER AVENUE

ISSUED FOR	
SCHEMATIC DESIGN DATE: _____	<input type="checkbox"/>
DESIGN DEVELOPMENT DATE: _____	<input type="checkbox"/>
BIDS & CONSTRUCTION DATE: <u>05/16/2022</u>	<input checked="" type="checkbox"/>
REVISION: DATE: _____	
REVISION: DATE: _____	
REVISION: DATE: _____	

DRAWINGS SHEET TITLE

ELECTRICAL
PANEL SCHED
AND RISER

SHEET NUMBER
E5.1
20132
PROJECT NUMBER

PLUMBING DEMOLITION KEYNOTES:

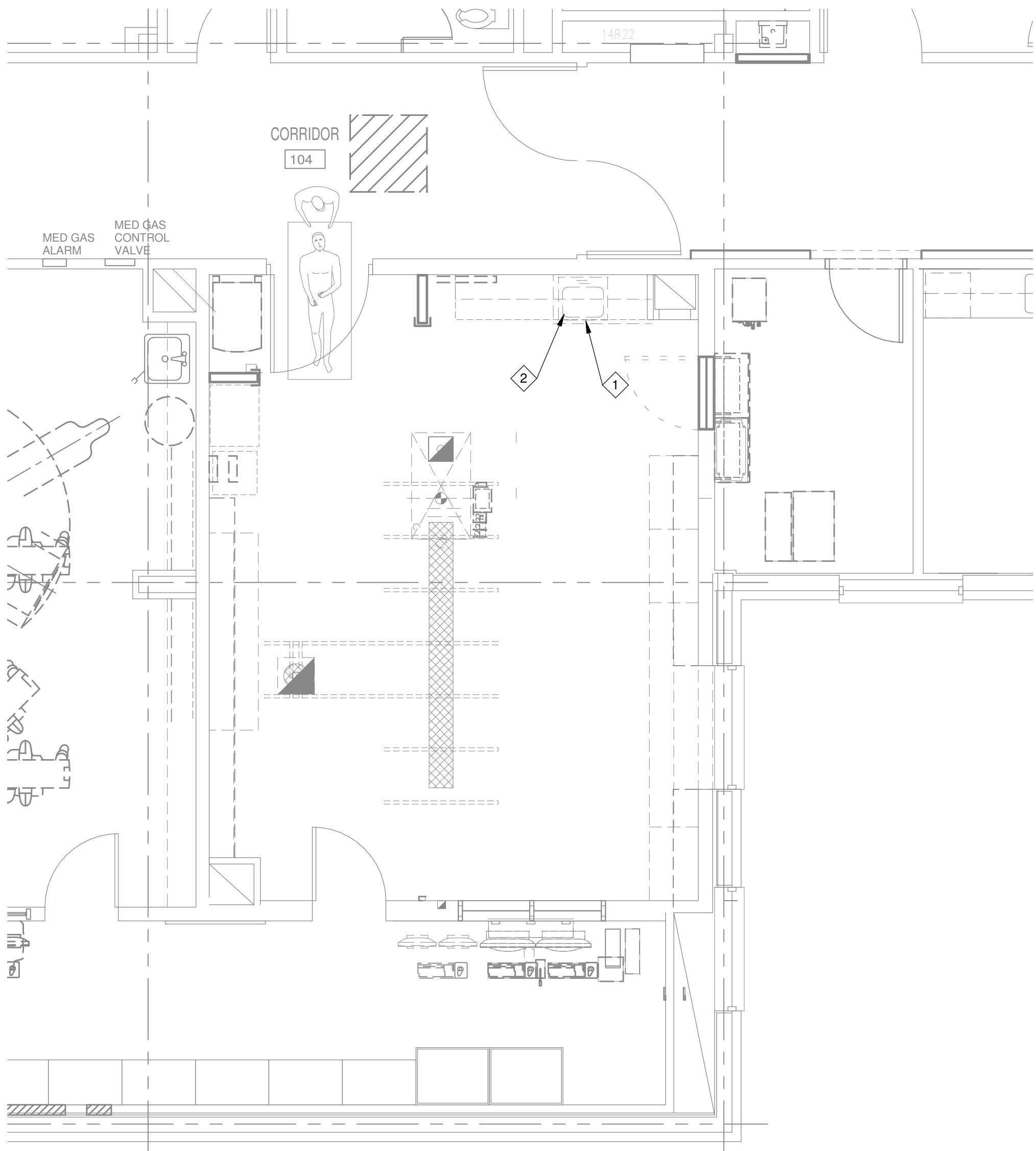
- ① REMOVE EXISTING PLUMBING FIXTURE TO ACCOMMODATE FOR NEW FLOOR PLAN. CAP EXISTING PLUMBING SERVICES BEHIND FINISHED SURFACES UNLESS NOTED OTHERWISE.
- ② REMOVE EXISTING WATER HEATER LOCATED BELOW SINK.

FIRE PROTECTION KEYNOTES:

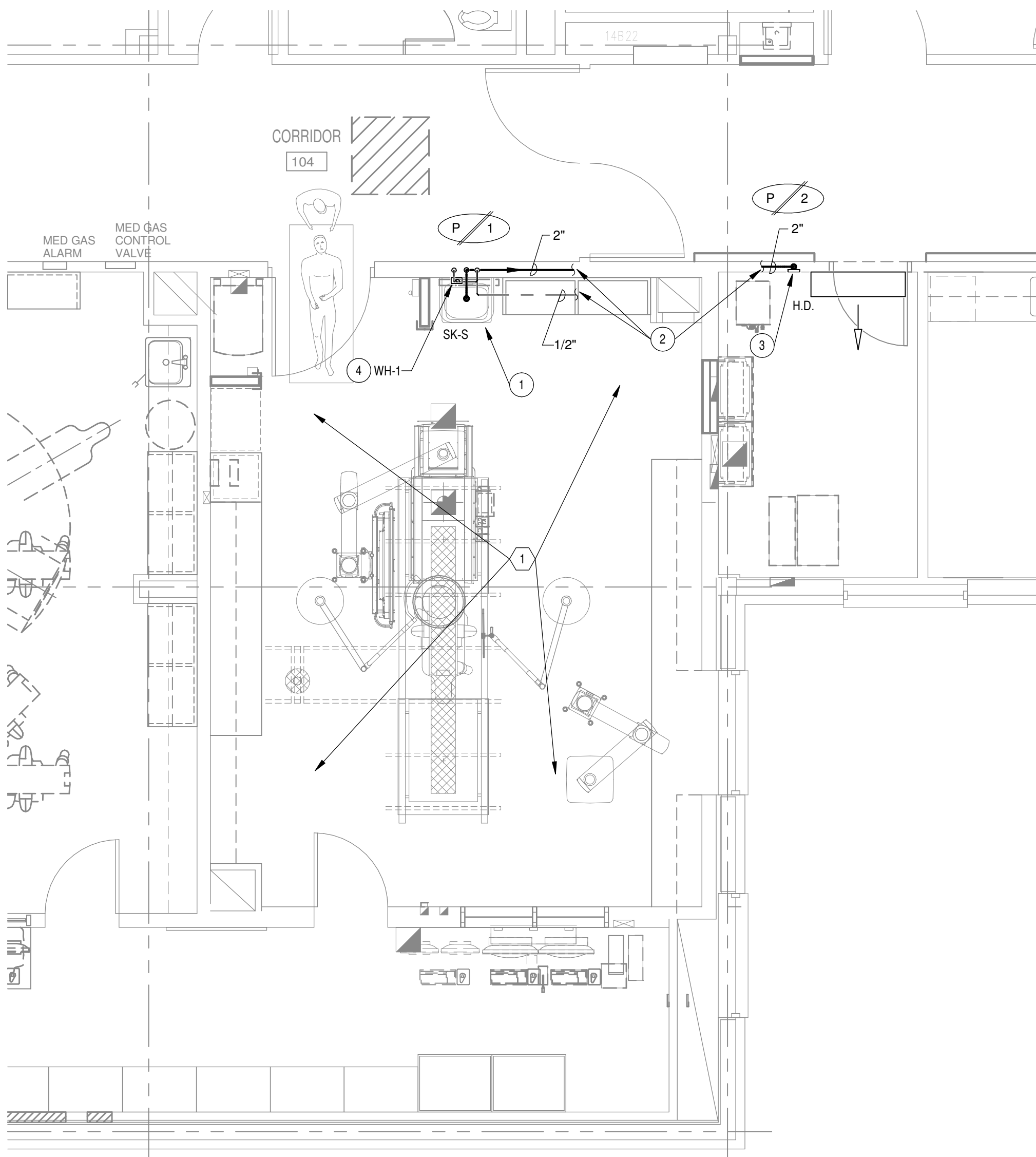
- ① CONTRACTOR SHALL ADJUST AND MODIFY EXISTING SPRINKLER HEADS AND PIPING TO ACCOMMODATE NEW CEILING HEIGHT AND NEW CEILING LAYOUT.

PLUMBING KEYNOTES:

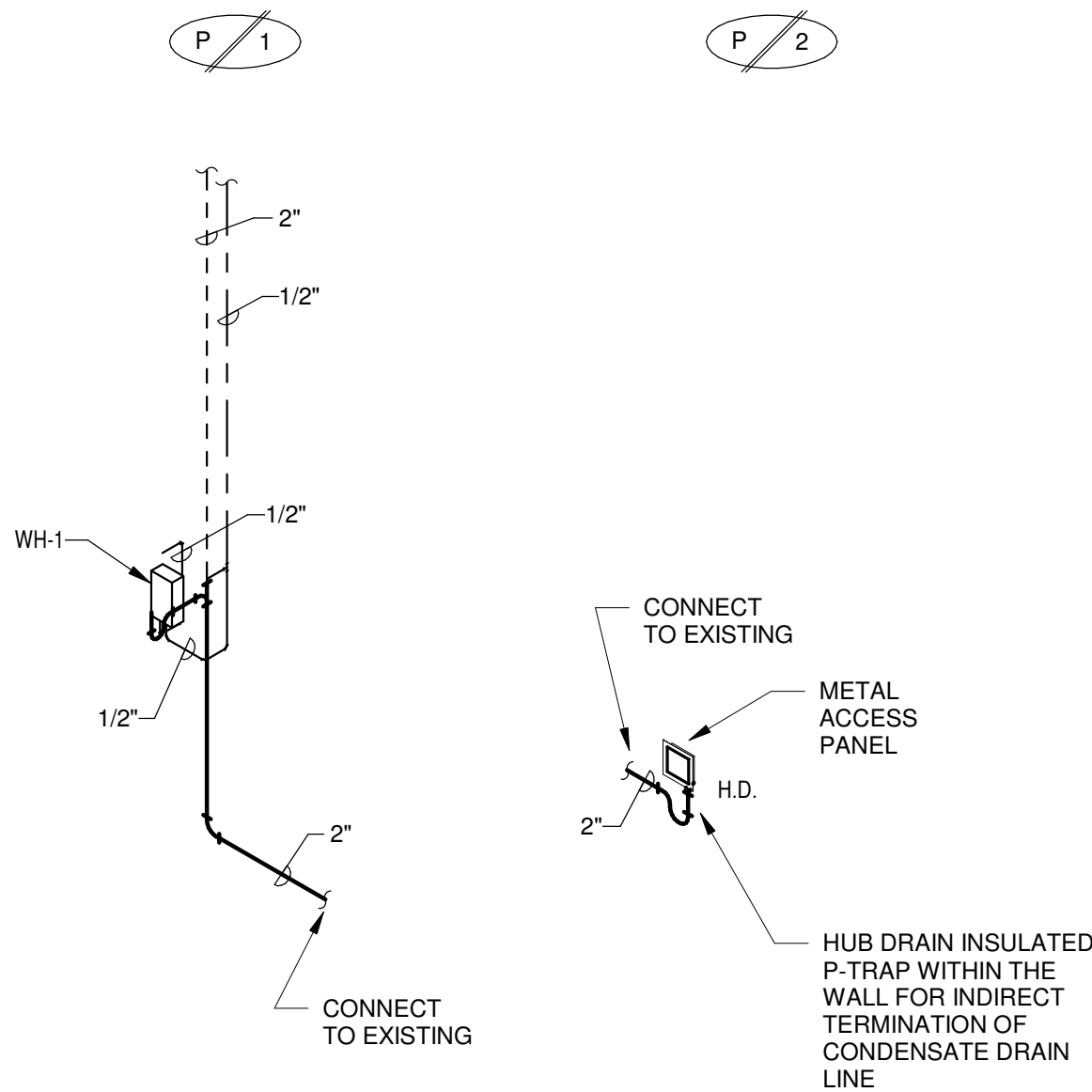
- ① NEW LOCATION OF PLUMBING FIXTURE. CONTRACTOR SHALL MAKE FINAL CONNECTION TO EXISTING PLUMBING SERVICES AS REQUIRED.
- ② CONTRACTOR SHALL CONNECT TO EXISTING PLUMBING SERVICES OF EQUAL LINE SIZE OR LARGER IN THIS VICINITY. CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO ANY ROUGH-INS.
- ③ HUB DRAIN AND INSULATED P-TRAP WITHIN WALL WITH WALL MOUNTED METAL ACCESS PANEL TO ACCESS INDIRECT TERMINATION OF A/C CONDENSATE DRAIN LINE AT THE HUB DRAIN.
- ④ INSTANTANEOUS ELECTRIC WATER HEATER MOUNTED ON THE WALL BELOW THE SINK.



① Plumbing Demolition Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions



② Plumbing & Fire Protection Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions



- NOTES:**
1. PLUMBING CONTRACTOR SHALL COMBINE AND EXTEND VENT LINES AS REQUIRED TO EXISTING V.T.R. VENT THRU ROOF SHALL MAINTAIN A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKES.
 2. CONTRACTOR SHALL SEAL ALL PIPE PENETRATIONS THRU RATED WALLS WITH FIRE RATED SEALANT SYSTEMS PER MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC U.L. ASSEMBLY.
 3. WATER HAMMER ARRESTER(S) SHALL BE INSTALLED ON PIPING SYSTEMS AND AT QUICK-CLOSING VALVES AS PER MANUFACTURER'S RECOMMENDATIONS.
 4. HUB DRAIN (HD) SHALL BE COMPLETE WITH TRAP GUARDS PER SPECIFICATIONS.

1304 BERTRAND DRIVE SUITE F7
LAFAYETTE, LOUISIANA 70506
(337) 234-7474 * FAX (337) 234-7774

Mechanical Contact:
Electrical Contact: David Carroll, P.E.
david@meconsulting.com

PROJECT No.: 21197.00

CONSULTING

CATH LAB ROOM 1 EQUIPMENT REPLACEMENT

CHRISTUS Hospital St Elizabeth

2830 CALDER AVENUE

BEAUMONT, TX 77701

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 05/16/2022	
REVISION:	
DATE:	
REVISION:	
DATE:	
REVISION:	
DATE:	

DRAWINGS SHEET TITLE

PLUMBING & FIRE PROTECTION PLAN

SHEET NUMBER

P2.1

20132

PROJECT NUMBER

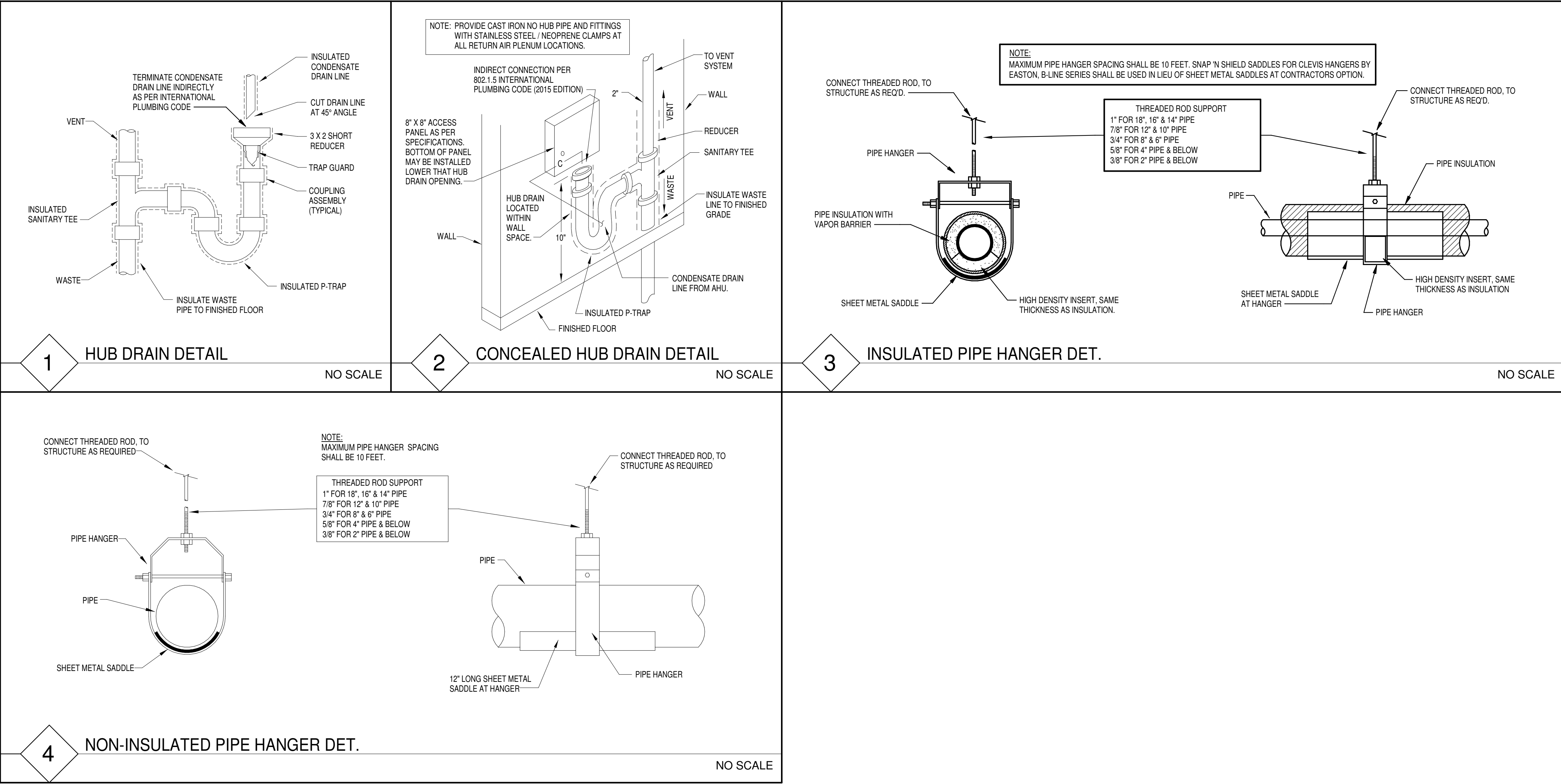
3875 Peach Street, Suite 720
Beaumont, Texas 77701
TEL: (409) 889-7146
FAX: (409) 889-7145
J. ROB CLARK, A.I.A.
RONALD N. JONES, A.I.A.
www.aalliance.com

Architectural Alliance Incorporated



PLUMBING FIXTURE SCHEDULE							
LABEL	FIXTURE TYPE	MANUFACTURER	PIPE CONNECTION				SPECIFICATION
			C.W.	H.W.	WASTE	VENT	
H.D.	HUB DRAIN	SURESEAL SS2009V, TRAP GUARD TG-22IP, MIFAB MI-GARD-2	-	-	2"	1 1/2"	DRAIN TRAP SEALER FOR 2" DIAMETER CONDENSATE HUB DRAIN.
SK-S	SCRUB SINK	ELKAY EWS3120KC	1/2"	1/2"	2"	2"	STAINLESS STEEL WALL HUNG SINGLE BOWL, 14 GAUGE 304 STAINLESS STEEL WITH A BUFFED SATIN FINISH, CENTER DRAIN WITH WALL HANGER AND MOUNTING BRACKETS BELOW SINK. OVERALL DIMENSION 31" X 19-1/2" X 24-3/8"; WITH ELKAY LK397C KNEE CONTROL AND ELKAY LK395A SPOUT WITH 0.5 GPM LANIMAR FLOW CONTROL. ELKAY LK-188 PERFORATED 3-1/2" GRID STRAINER, MCGUIRE 8912 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG; 3/8" ANGLE SUPPLIES WITH STOPS. CAULK AROUND PERIMETER OF FIXTURE.

WATER HEATER SCHEDULE						
UNIT NO.	SERVICE	CAPACITY (GALLONS)	ELECTRIC KW INPUT	TEMPERATURE SETTING	ELECTRICAL SERVICE	COMMENTS
WH-1	SCRUB SINK "SK-S"	TANKLESS	6.24	110°F	208-1-60	CHRONOMITE CM-30L/208, STIEBEL ELTRON OR PRIOR APPROVED EQUAL



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PLUMBING SCHEDULES & DETAILS

SHEET NUMBER

P3.1

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(337) 234-7474 * FAX (337) 234-7774

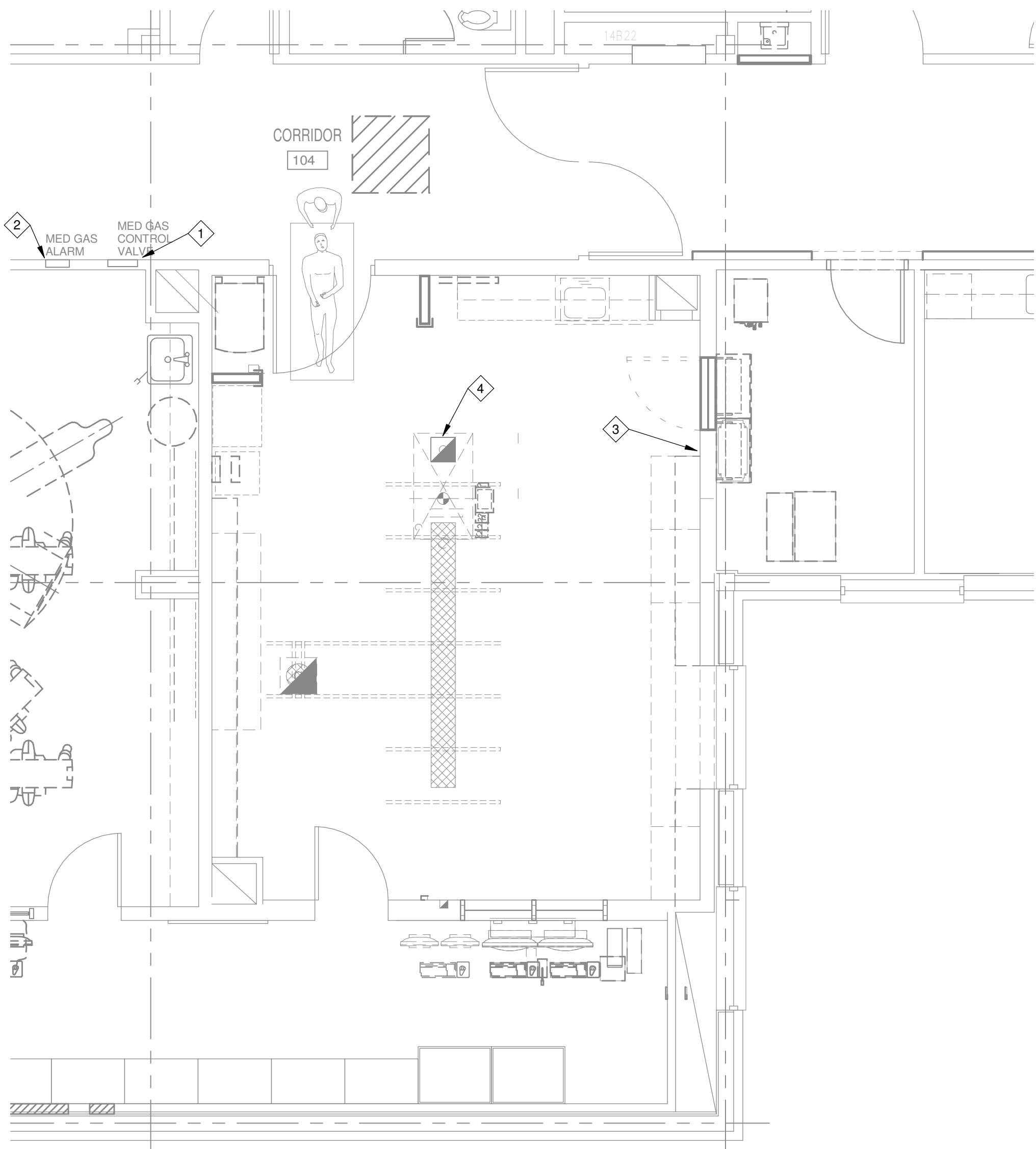
Mechanical Contact:
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david@meconsulting.com

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MEDICAL GAS DEMOLITION KEYNOTES:

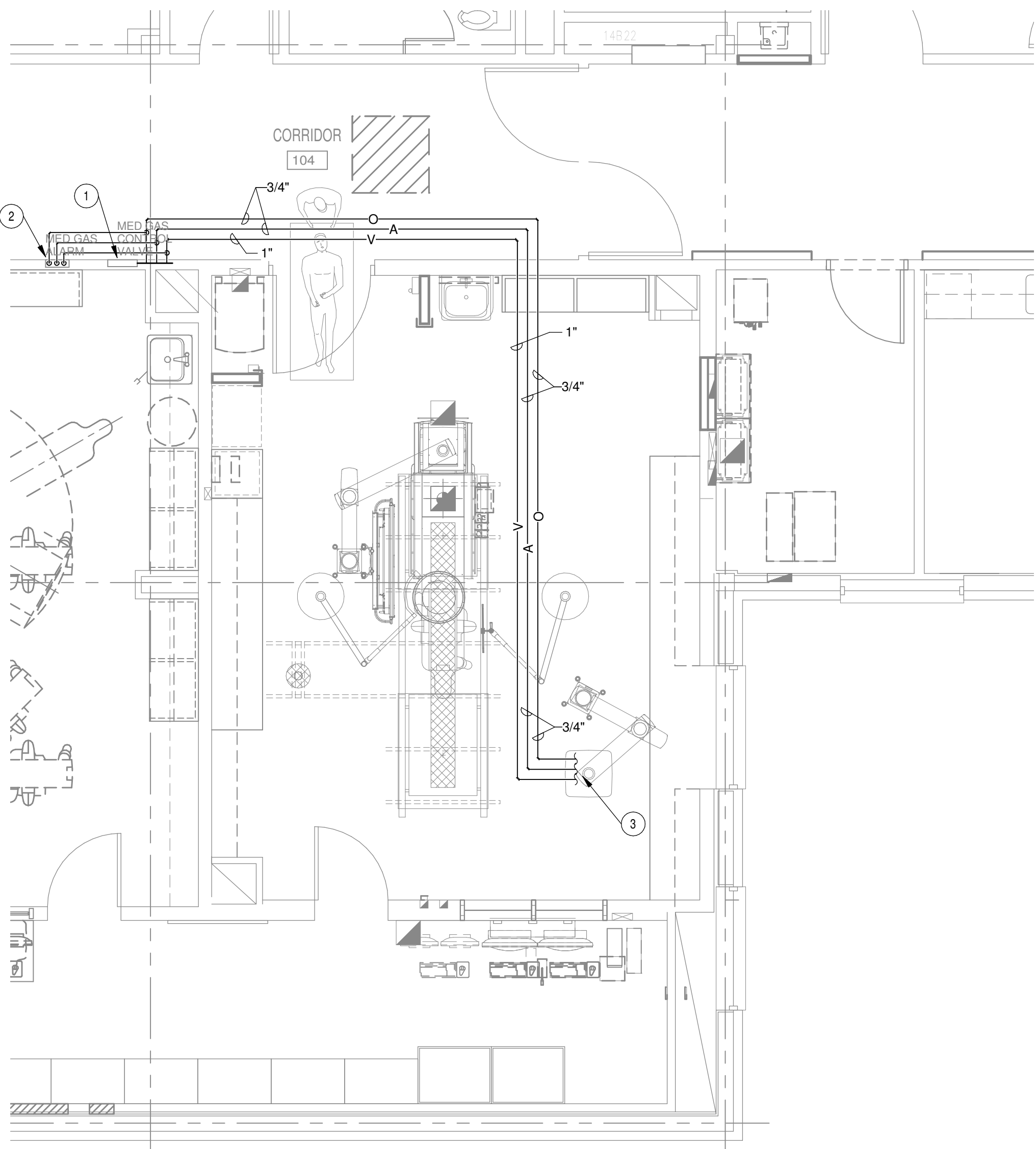
- 1 REMOVE EXISTING MEDICAL GAS ZONE VALVE BOX AND REPLACE WITH NEW.
- 2 REMOVE EXISTING MEDICAL GAS ALARM PANEL AND REPLACE WITH NEW.
- 3 REMOVE EXISTING WALL MOUNTED MEDICAL GAS OUTLETS AND CAP LINES BEHIND FINIHSED SURFACES AS REQUIRED.
- 4 REMOVE EXISTING MEDICAL GAS FLOOR MOUNTED BOX AND CAP LINES BEHIND FINISHED SURFACES AS REQUIRED.



1 Medical Gas Demolition Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

MEDICAL GAS KEYNOTES:

- 1 NEW MEDICAL GAS WALL MOUNTED ZONE VAVLE BOX TO MATCH EXISTING CATH LAB 2 OR BEACONMEDAES MODEL ZVB-3-BC-ENG. CONTRACTOR SHALL CONNECT TO EXISTING MEDICAL GAS PIPING AS REQUIRED.
- 2 NEW MEDICAL GAS ALARM PANEL TO MATCH EXISTING CATH LAB 2 OR BEACONMEDAES MODEL M3-A10-OAV. CONTRACTOR SHALL CONNECT TO EXISTING MEDICAL GAS PIPING AS REQUIRED.
- 3 MEDICAL GAS LINES SHALL CONNECT TO EQUIPMENT SUPPLIED BY STRYKER COMMUNICATIONS. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH EQUIPMENT SUPPLIER AND MAKE FINAL CONNECTIONS AS REQUIRED.



2 Medical Gas Plan
1/4" = 1'-0" Refer to Architectural Drawings for All Dimensions

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david@meconsulting.com

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DRAWINGS SHEET TITLE

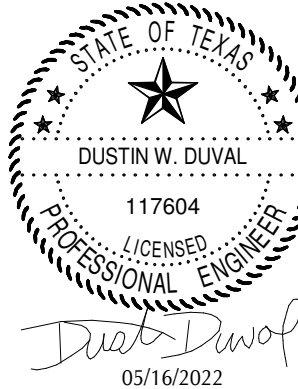
MEDICAL GAS PLAN

SHEET NUMBER

MG2.1

20132

PROJECT NUMBER



3875 Peachtree Dunwoody Rd
Suite 720
Atlanta, GA 30328
Tel: (404) 885-7145
Fax: (404) 885-7145
www.aarchitect.com

J. ROSE CLARK, AIA
RONALD N. JONES, AIA